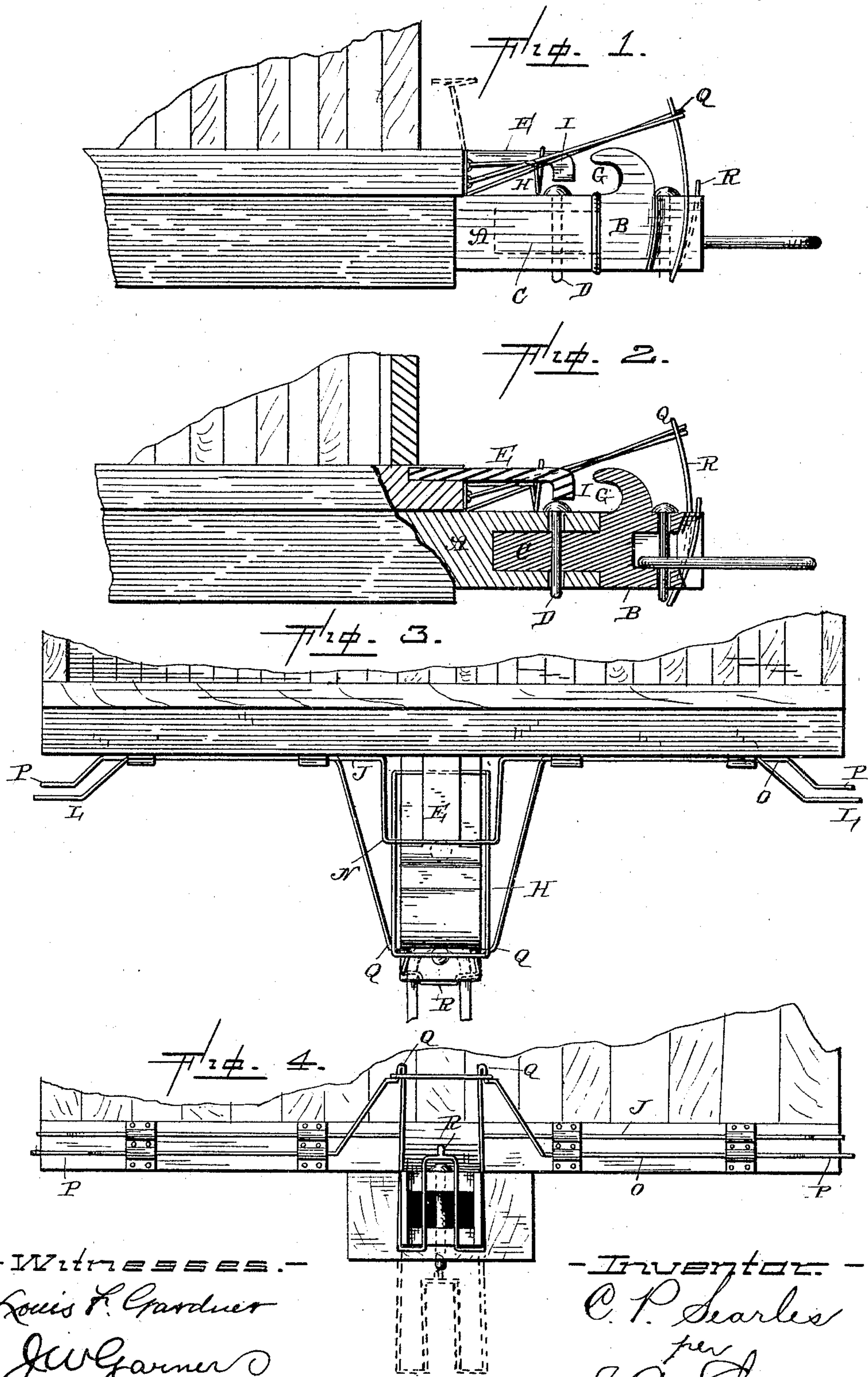


(No Model.)

C. P. SEARLES.  
CAR COUPLING.

No. 286,080.

Patented Oct. 2, 1883.



-Witnesses.-

Louis R. Gardner  
J. W. Garner

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C. P. Searles  
per  
J. A. Lehmann, atty



# UNITED STATES PATENT OFFICE.

CHARLES PHILANDER SEARLES, OF COLUMBUS, OHIO, ASSIGNOR OF ONE-HALF TO GEORGE W. BUTLER, OF SAME PLACE.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 286,080, dated October 2, 1883.

Application filed August 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES PHILANDER SEARLES, of Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in car-couplings; and it consists in an attachment which can be applied to any of the common draw-heads now in use, for the purpose of enabling cars to be coupled without the necessity of having men go in between the cars, and thus risk both life and limb.

Figure 1 is a side elevation of a car-coupling embodying my invention. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a plan view. Fig. 4 is a front elevation.

A represents an ordinary draw-head, and B the casting which is applied thereto. This casting has a shank, C, formed on its rear end, which enters the draw-head A, and the draw-head and casting B are secured together by means of the pin D. This pin D is secured to or forms a part of the plate or casting E, which has its rear end pushed into a suitable groove or socket formed to receive it, and which plate or casting moves back and forth with the draw-head when the cars run together. The pin projects downward from the under side of the front end of the plate or casting, and passes both through the draw-head A and the projection which is formed upon the rear end of the casting B. The casting B, being secured to the front of the draw-head, projects outward, as shown, and takes the place of the draw-head. In the front end of the casting is formed a recess to receive the end of the ordinary coupling-link, and passing vertically through the front end of the link is an ordinary coupling-pin. Upon the top of the casting B is formed the hook G, behind which the coupling-link may be made to catch.

Held in between the plate or casting and the

top of the draw-head A is the rectangular coupling-link H, which can play back and forth between the front end of the car and the shoulder I, which is formed upon the plate or casting.

Journaled or pivoted upon the front end of the car is the crank-shaft J, which has an operating-crank, L, at each end, and which has its central portion, N, formed as shown. This part N is turned down or bent, as shown, for the purpose of catching inside or behind the link for the purpose of holding it in position. When it is desired to prevent this link from moving forward far enough to couple with the hook formed upon the casting B of the approaching car, the link is pushed backward and the part N is made to catch inside of the link, and this part N then prevents the link from being forced forward. When it is desired, however, to have the cars linked together, the shaft J is turned so as to leave the part N up, when the link is then moved forward, so that its rear end will catch against the front part of the portion N. Also, journaled upon the front end of the car is a second crank-shaft, O, which is provided with a crank, P, at each end, and which is provided with the bent parts Q, catching in the link and holding it up, and the second bent portion, R, at its center, for catching under the ordinary coupling-link and holding it in position, so that it will enter the mouth of the piece B of the adjoining car or its ordinary draw-head. When it is desired that this rectangular link shall engage with the hook upon the casting B of the approaching car, the shaft O is turned so that the part Q will catch under the link and hold it in a raised position, ready to drop over the top of the hook as soon as it approaches sufficiently near. This crank-shaft O can be used either for holding the link ready to couple or for uncoupling the cars, as may be desired. When the ordinary link is used in the front of the casting B, the part R catches under or passes through the link, so as to hold it at any desired angle.

This coupler is provided with two links, one of which is to be used in case of an emergency, while neither one interferes with the other. While the square link upon the top is in use,

it is pulling directly against the pin which secures the casting B in position in the draw-head.

Having thus described my invention, I  
5 claim—

1. The combination of the draw-head A, casting B, having the hook upon its top, a second coupling-link, and a crank-shaft having the bent portions Q R for operating the two  
10 coupling-links either together or independently of each other, substantially as described.

2. The combination of the draw-head, the casting B, applied thereto, the plate or casting provided with a pin which passes down through

the draw-head and casting, the coupling-link, 15 and the crank-shaft O, provided with the bent part N, substantially as set forth.

3. In a car-coupling, the combination of the draw-head A, the casting B, secured in the draw-head, the coupling-link, and the two bent 20 crank-shafts, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES PHILANDER SEARLES.

Witnesses:

CHAS. S. CHERINGTON,  
J. S. GOLD.