E. CAMPBELL.

Improvement in Car-Couplings.

No. 115,819

Patented June 13, 1871.

Fig. 1.

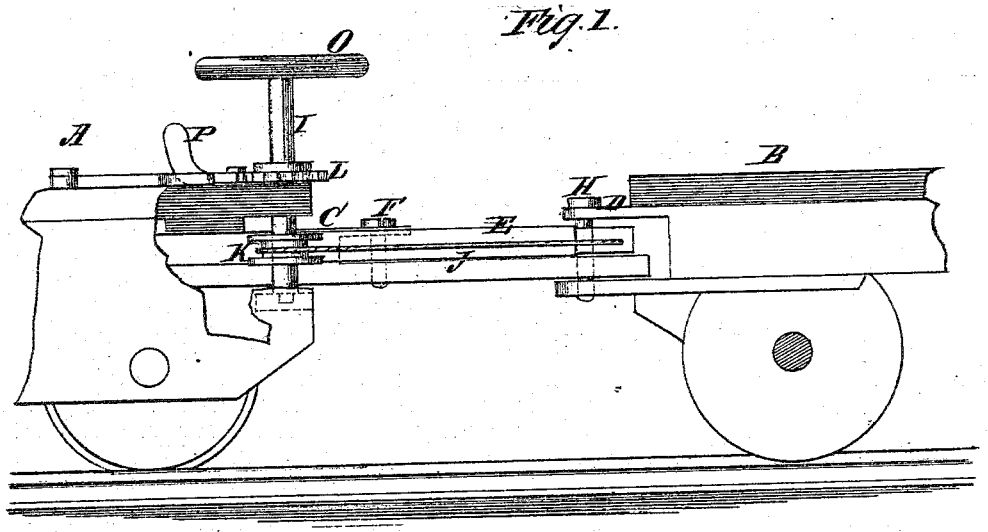
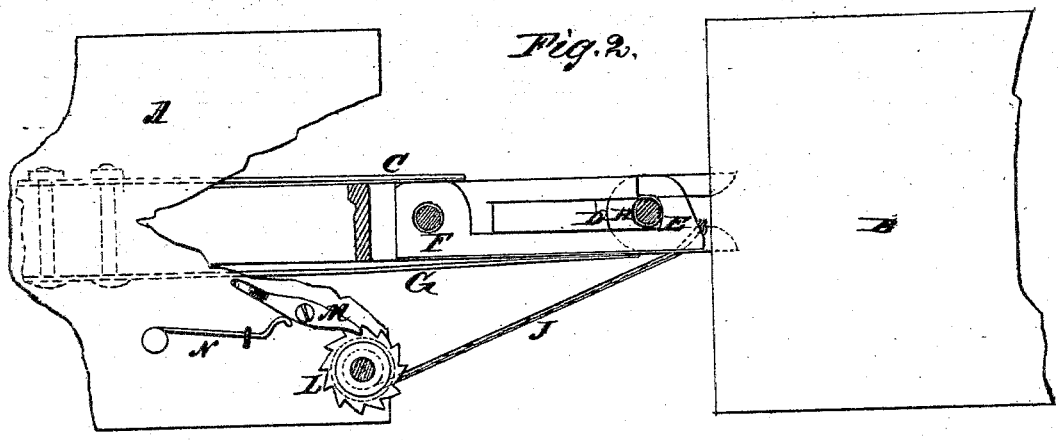


Fig. 2.



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UNITED STATES PATENT OFFICE.

EUGENE CAMPBELL, OF MEDUSA, NEW YORK.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. 115,819, dated June 13, 1871.

To all whom it may concern:

Be it known that I, EUGENE CAMPBELL, of Medusa, in the county of Albany and State of New York, have invented a new and useful Improvement in Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

My invention consists in combining a forked draw-head and spring-hook, which will be first fully described in connection with all the parts of a coupling, and then clearly pointed out in the claim.

In the accompanying drawing, Figure 1 represents sections of two railroad cars connected together by my improved coupling. Fig. 2 is a top or plan view.

Similar letters of reference indicate corresponding parts.

A and B represent the respective railroad cars. C is the draw-head of the car A; and D the draw-head of the car B. This draw-head is forked or bifurcated, as shown in Fig. 2 of the drawing. It is a peculiar feature of construction, which, when combined with the spring-hook, constitutes the basis of my improvement. E is the coupling-hook, which is attached to the draw-head C by the pivot-pin F. G is a spring, which bears against the back of the hook with a constant pressure. H is a coupling-pin in the draw-head D, with which the hook engages to complete the coupling. This coupling-pin is made stationary in the draw-head in any suitable manner. The uncoupling is done by the brakeman or conductor on the platform of the car by means of the vertical shaft I and cord or chain J. One end of the cord or chain is attached to the coupling-hook E, and the other connected with the drum K on the shaft. L is a ratchet-wheel on the shaft. M is a spring-pawl, which engages with the ratchet. N is the spring, which constantly bears against the pawl and keeps the latter engaged with the ratchet. The shaft is turned by means of the hand-wheel O. When the coupling-hook is drawn back for uncoupling the cars, the ratchet and pawl hold it back until the latter is released from the ratchet. The releasing is done with the foot, the end of the pawl being turned up for that purpose, as seen at P. S is a draw-head, forked or bifurcated, as shown in Fig. 2 of the drawing. This is a most important and peculiar feature of construction, and constitutes the basis of my improvement. When applied to a coupling provided with a suitable spring-hook, it becomes an invaluable desideratum in railroad travel, reducing greatly the liability of cars to switch off the track, and insuring, to a great extent, uniformity and evenness of motion.

I do not confine myself to the use of the ratchet and pawl, as, for simply uncoupling the cars, they may be dispensed with.

My main object is to allow the cars to couple automatically, and to provide means for uncoupling them without going between them. This I have accomplished. By my arrangement the cars will couple when they come together, and the necessity for going between them for either coupling or uncoupling is entirely obviated.

The advantages of this arrangement will be readily understood by all who are acquainted with railroad management.

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

The bifurcated draw-head D, combined with the pivoted hook F, for the purpose specified.

EUGENE CAMPBELL.

Witnesses:

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