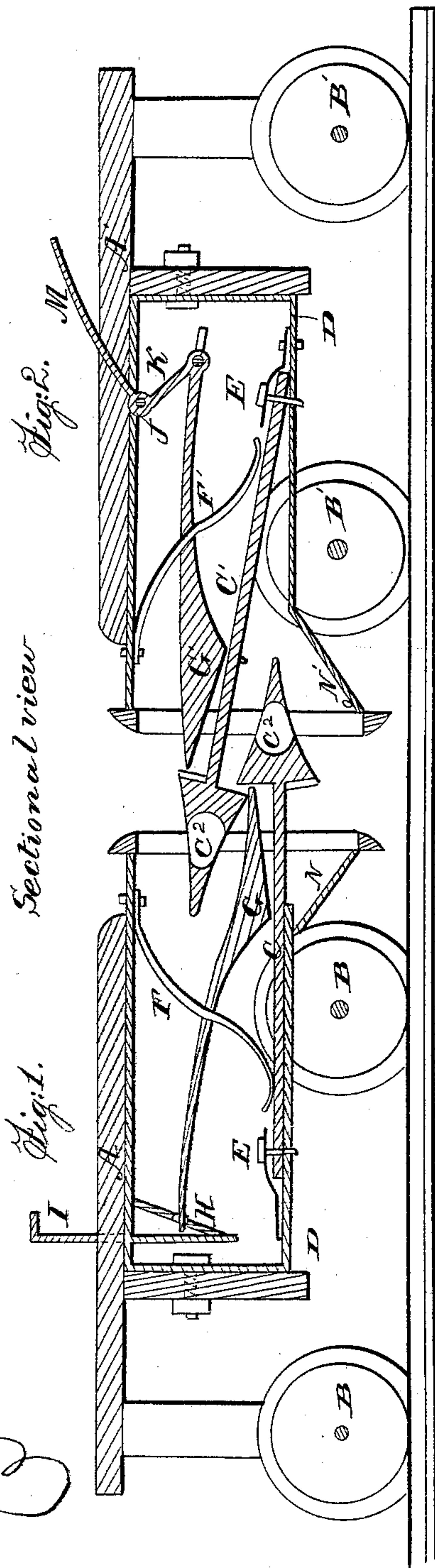


S. S. QUEST.
Car Coupling.

No. 57,566.

Patented Aug. 28, 1866.



Witnesses

Charles A. Smith
John Melvin

Inventor

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UNITED STATES PATENT OFFICE.

SAMUEL S. QUEST, OF WELLSBURG, WEST VIRGINIA.

IMPROVED CAR-COUPLING.

Specification forming part of Letters Patent No. 57,566, dated August 28, 1866.

To all whom it may concern:

Be it known that I, SAMUEL S. QUEST, of Wellsburg, Brooke county, in the State of West Virginia, have invented a new Improvement in the Mode of Coupling Railroad-Cars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The accompanying drawings, being a part of this specification, may be regarded as representing a side elevation of a longitudinal section of two cars attached by my coupler.

The subject of my invention consists in a series of levers attached to an automatic coupler, for the purpose of detaching the cars at will, which will be more clearly understood by consulting the accompanying drawings in connection with the letters of reference in the following description.

A A represent portions of the truck-frames, and B B B' B' the wheels. C C' are coupling-bars resting on bed-plates D D', and secured at their rear ends by drop-bolts E E'. F represents a spring, which presses upon each of the lock-bars C C' at a short distance from its rear end, so as to prevent their bouncing out of their respective connections with each other when the cars are passing over a rough or uneven piece of track.

The bars C C' have at their forward ends arrow-shaped heads, with concave and convex shoulders, respectively, for the purpose of locking firmly in each other. They are also provided with apertures or oblong holes C², by means of which a car with our improvement may be attached to one having the old attachment by link and pin.

The upper shoulders of the lock-bars may be made concave, and the lower ones convex, or vice versa, in order to permit the more free deflection of the bars when the cars are passing around curves.

The manner of using said improved coupler is as follows: The cars being run together, either of the bars C C' which happens to be the higher runs up upon the other, the spring F' yielding so as to permit one of the bars to run up on the other and lock. The levers G G', resting on the lock-bars C C' at the fulcrum G G', also the transverse lever H in Fig. 1, are for the purpose of detaching the cars, which is done at the first indication of

danger, when the cars are running, by the brakeman simply shoving down the cam I, which passes from the transverse lever H up through the floor of the platform of the car. This arrangement, as represented by Fig. 1, is intended for passenger-coaches.

The transverse rock-shaft J, Fig. 2, with the arm K, together with the lever M, being attached to the arm of the lever G', are intended to detach or uncouple the cars by drawing down the lever M, when the point of the lever G' is raised, and the head of the lock-bar is allowed to slide off, by which operation the cars are detached. This arrangement is designed especially for freight-cars, as the truck-timbers of freight-cars interfere with the use of the transverse lever, as seen in Fig. 1.

The inclined plane N N' is for the purpose of compensating for the inequality in the relative height of the cars, and for the purpose of insuring a perfect connection of the cars by the locking of the bars C C', notwithstanding said inequality of height. This object is accomplished, when one car is lower than the other to which it is desired to couple it, by the point of the lock-bar C of the lower car striking the inclined plane N at O and sliding up to the level of the bar C', with which it will become firmly locked, the point still resting on the inclined plane at its junction with the bed-plate D, which affords it a firm support.

I disclaim any right or invention in the lock-bars C C' or the spring F, these having been already patented to John C. Noble and Thomas L. Birch, of Washington, Pennsylvania; but

What I claim as new and as my own invention, for which I desire to secure Letters Patent, is—

The combination of the levers G G', H, J, K, and M, together with the inclined plane N, when properly constructed and adapted to each other, so as to secure the object proposed, substantially as hereinbefore explained.

The above specification of my improvement in car-couplings signed this 28th day of March, 1866.

SAMUEL S. QUEST.

Attest:

O. W. LANGFITT,
TH. MELVIN.