S. SLACK.

Car Coupling.

No. 42,696. Patented May 10, 1864.

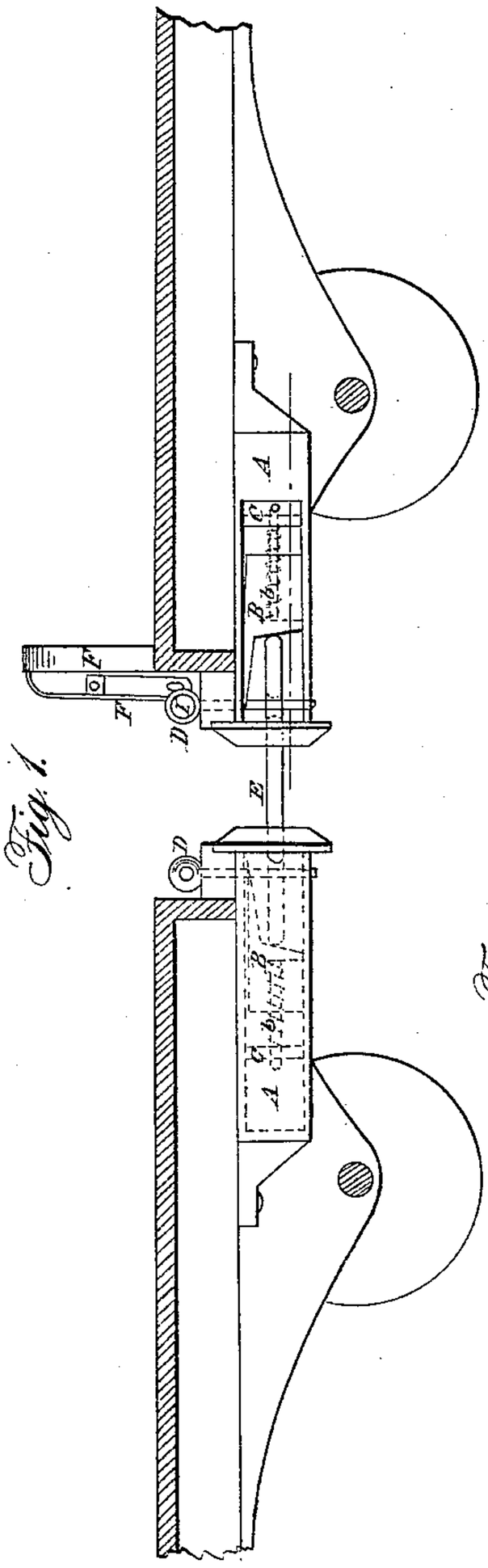

Fig. 1.

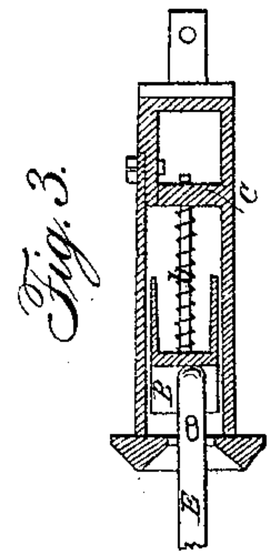

Fig. 3.

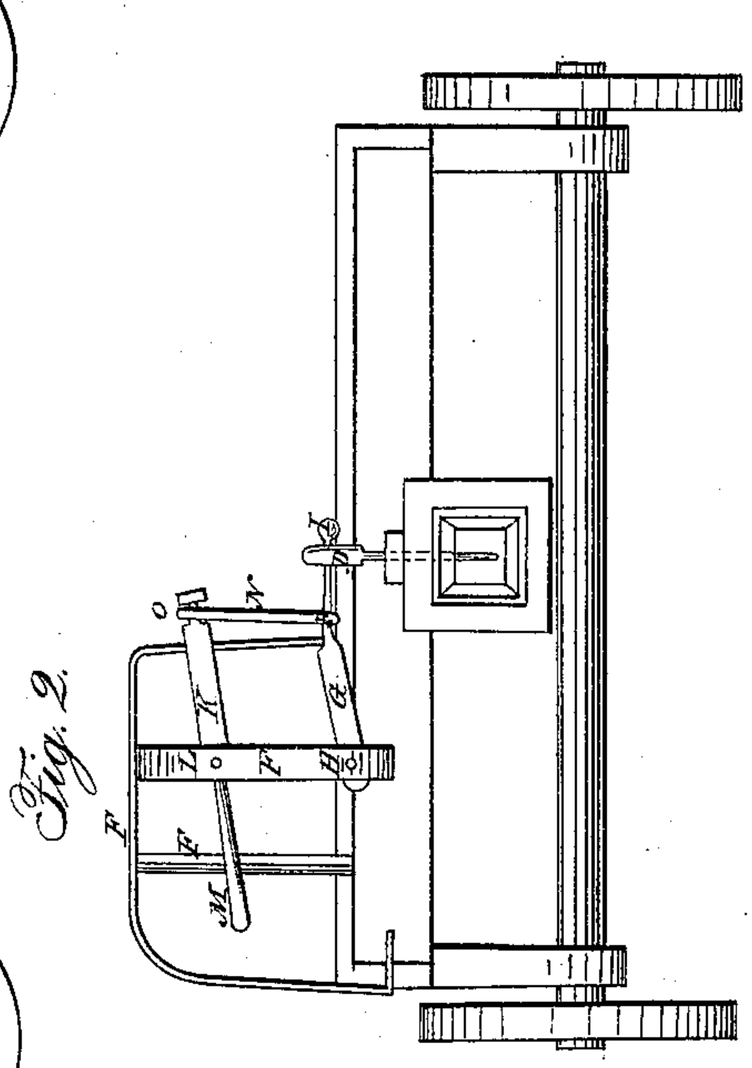

Fig. 2.

Fig. 4.

Fig. 5.

Witnesses:

A. D. Ramsdell.

Charles. Herron.

Inventor:

By Strickland. Slack.

Somes. Brown. & Co.

UNITED STATES PATENT OFFICE.

STRICKLAND SLACK, OF OXFORD, PENNSYLVANIA.

IMPROVEMENT IN CAR-COUPLINGS.

Specification forming part of Letters Patent No. **42,696**, dated May 10, 1864.

To all whom it may concern:

Be it known that I, STRICKLAND SLACK, of Oxford, in the county of Chester, in the State of Pennsylvania, have invented a new and Improved Mode of Constructing the Shackling for 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 object of my invention is to provide a means by which railroad-cars may be shackled and unshackled without the necessity of a man going between the cars for that purpose, and thus avoiding accidents, which frequently occur in that operation.

To accomplish this I construct my bunter in the form of an elongated square box, A A, Figure I. Within the bunter I place the piece of metal B. Fig. IV, is a perspective view of the piece B, Fig. I, detached from the bunter. This piece of metal is attached to the end of a metallic rod, *b*, within the bunter, as shown in Figs. I and III. The other end of the rod passes through a hole in the partition C, Figs. I and III, which will admit of the piece B being moved back and forth in the bunter. Between the piece B and the partition C the rod is surrounded by a spiral spring, or its equivalent, which extends from the piece B to the partition C, as shown in Figs. I and III. When the bolt D is drawn out and the link E is removed, the spring forces the piece B out so that the projecting part of it passes under the upper hole in the bunter through which the bolt D passes and prevents the bolt from dropping through the bunter until the piece B is forced back by the link E. The link is made in the form shown by Fig. V, which is a flat iron bar with an oblong hole through each end through which the bolt passes. This mode of making the link greatly increases the strength thereof.

Fig. III represents the bunter with the bottom part removed, and with the link and bolt in the position they occupy when the cars are shackled. Fig. II is an end view of the car, with my arrangement for unshackling.

F F F is a frame for the support of the levers. G is a lever with its fulcrum at H, and the end extending through the bolt D. The bolt is retained on the lever by the knob I, or by any other means that will answer the desired end. K is also a lever with its fulcrum at L near its center, M being the handle. The levers are connected by the rod N, attached to the end of the lever K, by means of a nut, or otherwise, as is shown at O. The other end of the rod is attached to the lever G, as is shown at P. Bearing down the handle M raises the lever G, to which the bolt D is attached, and draws the bolt out of the bunter, when the piece B springs forward and prevents the bolt from dropping through the bunter until the piece B is forced back beyond the hole by the link E.

In shackling, the link E, on entering the opening of the bunter, strikes the piece B and forces it back, and the bolt D drops through the link and shackles the cars, avoiding the danger in going between the cars for the purpose of inserting the bolt. In unshackling, the man, instead of going between the cars, stands on the platform of the car, or on the top, and by bearing down the handle M draws the bolt D out of the bunter and unshackles the cars.

What I claim as new in my invention, and desire to secure by Letters Patent, is—

The piece B and spring *b*, in combination with the levers G and K, the bolt D, and the link E, substantially as set forth, and for the purpose specified.

STRICKLAND SLACK.

Witnesses:

H. J. RAMSDELL,

CHARLES HERRON.