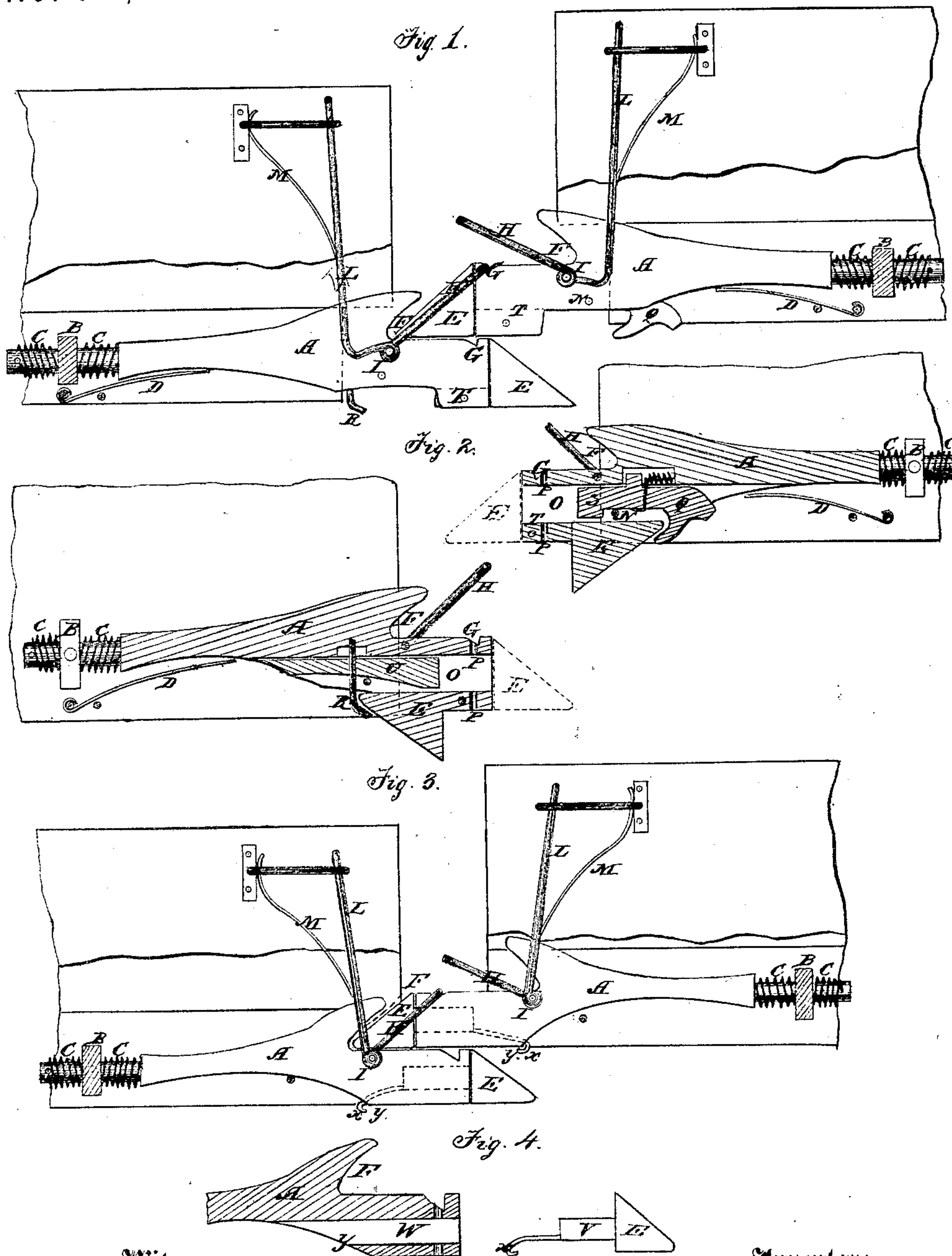


SAMUEL S. SARTWELL.
Improvement in Car-Couplings.

No. 114,353.

Patented May 2, 1871.



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UNITED STATES PATENT OFFICE.

SAMUEL S. SARTWELL, OF CAMDEN, NEW YORK.

IMPROVEMENT IN CAR-COUPPLINGS.

Specification forming part of Letters Patent No. **114,353**, dated May 2, 1871.

To all whom it may concern:

Be it known that I, SAMUEL S. SARTWELL, of Camden, in the county of Oneida and State of New York, have invented a new and Improved 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 relates to car-couplings; and consists in certain improvements thereon, which will first be described in connection with all that is necessary to a full understanding thereof, and then clearly pointed out in the claims.

Figure 1 is a side elevation of my improved car-coupling. Fig. 2 is a longitudinal section of the same. Fig. 3 is a side elevation, showing a modification of the construction of the buffer-heads for shifting to make the link-connection; and Fig. 4 is a view of some of the details, one being shown in section and the other in side view.

Similar letters of reference indicate corresponding parts.

The draw or buffer heads A, being designed to work one upon the top of another for making the connection, are connected at the rear ends to an oscillating bar, B, to allow the connecting ends to work up and down freely, and this connection is made by the end of the said draw-head passing through the bar so as to slide back and forth to relieve the cars of the sudden shocks and jars of stopping and starting, which sliding is governed by the spiral springs C.

Below each draw-head is a flat spring, D, for supporting them in a manner to prevent rattling.

Each buffer is provided with a beveled head, E, at the end, and a notch, F, on the upper side, at some distance from the end, in which the head of the buffer which takes the upper side in coupling fits to work, for exercising the function of the buffer.

The heads are wholly beveled on the upper sides, and the one which happens to be the highest when they come together will be forced up to the top of the other.

Behind the upper end of the beveled face each buffer is provided with a notch, G, trav-

ersing its upper face, for the reception by the upper one of the draw yoke or link H of the lower one, each buffer being provided with a yoke, which is pivoted at I, and so connected to the lever L that by forcing it backward the link may be raised out of the notch G for disconnecting the cars.

The levers L have each a spring, M, so acting upon them that the links H will be held in the notches.

In order to be able to couple cars having my improved coupling apparatus with those having the ordinary link-and-pin coupling apparatus, I have made the beveled heads E of the buffers separately from the latter, and have pivoted them in one case to the said buffers, which are grooved in the lower side, as shown at N, so that when the heads are turned downward and backward, as shown in Fig. 2, the sockets O will be presented for the ordinary links, through the upper and lower walls of which sockets are the holes P, for the usual bolts for securing the links commonly employed. These heads may be held in the positions represented in Fig. 2 by sliding hooks like that represented at Q or by the hook R.

The hook Q, which is arranged in the same groove in which the head is pivoted, is provided with a shank, S, which, being adjusted above the shank T of the head when in the position represented in Fig. 1, will hold the head in the said position.

When the hook R is used, a sliding block, U, may be employed for the same purpose.

I propose, as an equivalent of this pivoted arrangement of the heads E, to connect them by shanks V, sliding into sockets formed in the buffers, as shown at W, and provided with spring-hooks to hold them in by engaging with the end y of one of the walls of the socket. In this case the heads will be entirely removed when the coupling by the ordinary links and bolts is employed.

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

1. The links connected rigidly to the levers L, and the latter provided with the springs M, arranged to hold the said links in the notches G, substantially as specified.

2. The heads E, made separately from the

buffers, and either pivoted to them or connected by the shanks V, inserted in the sockets, and the spring-hooks engaging the walls thereof, all substantially as specified.

3. The combination, with the buffer and the head pivoted thereto, of the sliding hook Q, having the shanks, all substantially as specified.

4. The combination, with the said pivoted head E and the buffer, of the sliding block U and the hook R, all substantially as specified.

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Witnesses:

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