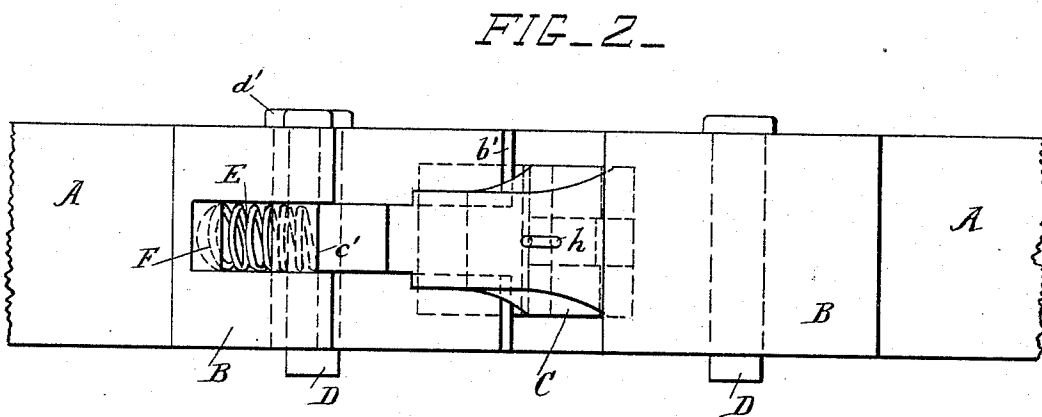
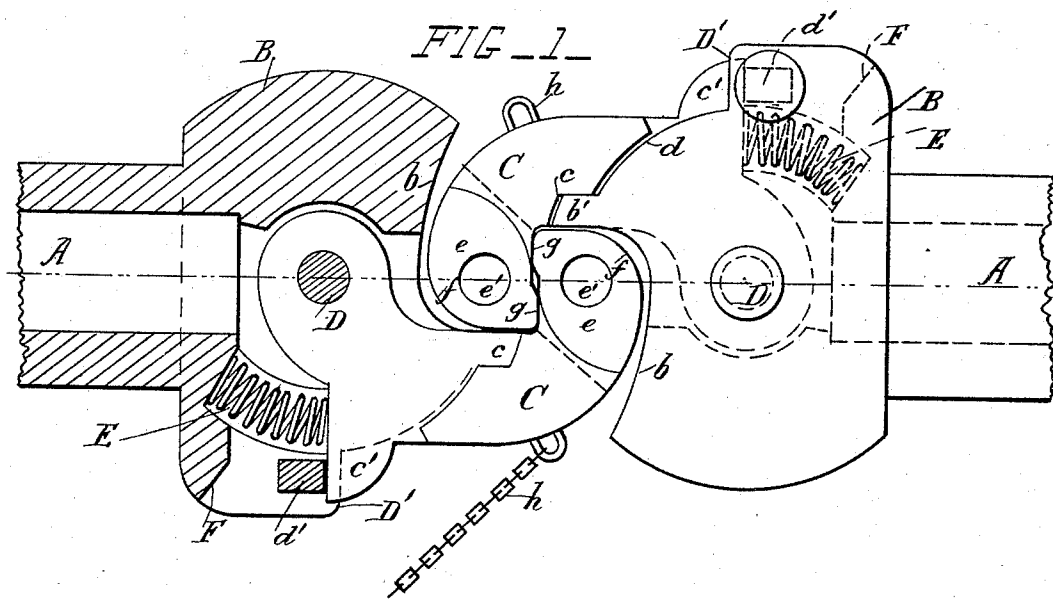


(No Model.)

S. SHEPARDSON.
CAR COUPLING.

No. 487,297.

Patented Dec. 6, 1892.



Witnesses

Walter Allen
Jeremiah Wright

Inventor

Samuel Shepardson
By his Attorney
Herbert W. Jenner.

UNITED STATES PATENT OFFICE.

SAMUEL SHEPARDSON, OF LA GRANGE, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 487,297, dated December 6, 1892.

Application filed March 14, 1892. Serial No. 424,832. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL SHEPARDSON, a citizen of the United States, residing at La Grange, in the county of La Grange and State of Indiana, 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 appertains to make and use the same.

This invention relates to car-couplings; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a plan view from above, showing the two halves of the coupling pushed together. Fig. 2 is a side view of the same.

A are the draw-heads, adapted to be attached to the ends of the cars in the usual manner. Each draw-head is provided with a similar socket B and a hook C, so that the halves of the coupling are exactly alike. The socket B is provided with a vertical pivot-pin D, arranged on the center line drawn through the coupling longitudinally. The front edge *b* of the socket B is curved on one side and the curve is formed on a circular arc struck from a point substantially at the center of the pivot-pin of the other half of the coupling. The front edge is further provided with projecting lugs *b'* on the other side and a curved portion *d*, formed on a circular arc struck substantially from the center of its own pivot-pin D.

D' are shoulders on the socket B, and *d'* is a locking-pin, which passes through the socket behind the said shoulders.

The hook C is pivoted on the pin D within the socket and is provided with recesses *c*, which engage with the lugs *b'*.

E is a spring arranged within the socket B and adapted to press against the back of the projection *c'* on the hook. This spring E normally holds the hook, as shown in the drawings, pressed against the said lugs *b'*. The front end *e* of the hook is forked and is provided with a vertical pin-hole *e'*, arranged on the center line of the coupling between the pivot-pins D. The projection *c'* is adapted to bear against the pin *d'* when the pin is in place. The pin *d'* is only dropped into place when one-half of the coupling is to be used

in connection with the ordinary coupling-link of a car or the pilot-bar of an engine. The pin *d'* then locks the hook C, and the coupling-link is connected to the forked end *e* of the hook by means of an ordinary coupling-pin dropped through the hole *e'*. The front end *e* of the hook is rounded at *f*, so that when the pin *d'* is withdrawn and the two similar halves of the coupling are pushed together each hook is pushed back against the pressure of its spring E until just before the hook strikes the curved portion *b*. The springs E then force the hooks into engagement with each other, as shown in the drawings.

F is a shoulder on the socket B for the projection *c'* to strike against, so that the hook cannot be forced so far back as to break the spring.

The front end *e* of each hook is provided with a slight projection *g*, which engages with a similar recess on the other hook, and as the pivot-pin of each hook is arranged on the center line of the coupling there is no tendency to separate the hooks when the cars are drawn along. When the cars are pushed together, the curved front ends of the hooks push against the curved front edges *b* of the sockets substantially on the center line of the halves of the coupling and the hooks still remain coupled. Each hook is provided with a chain or link *h* for uncoupling it from the other hook. This chain or other similar device is worked from the side of the car in any convenient manner. It is sufficient to pull one chain to uncouple the cars, as each hook can be moved far enough back to clear the other hook, and the curvature of the front edge *b* is such as to permit of this motion. The projections *g* are beveled at their meeting ends, so that they will not prevent either hook from being drawn back.

What I claim is—

1. In a car-coupling, the combination of two similar draw-heads, each provided with a socket having a curved edge *b* and a lug *b'* in front, a curved hook pivoted in the socket, and a spring normally holding the hook against the said lug, the said hooks having curved front ends adapted to press against the said edges *b*, substantially on the center line of the two draw-heads and being pivoted substantially on the said center line, whereby the said

springs are not subjected to strain when the cars are moved forward or backward and whereby the said hooks are adapted to engage automatically when pushed together.

- 5 2. In a car-coupling, the combination, with a draw-head provided with a socket having lugs *b'*, of a hook provided with a forked front end having a hole for a coupling-pin and the
10 projection *c'*, the removable pin passing through the socket behind the said projection and adapted to hold the hook against the said

lugs, and a vertical pin pivoting the said hook in the socket, the said pin and hole being arranged substantially on the center line passing through the draw-head longitudinally. 5

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

SAMUEL SHEPARDSON.

Witnesses:

HERBERT W. T. JENNER,
H. M. STERLING.