(No Model.)

H. C. HART & C. W. STANTON.

CAR COUPLING.

No. 434,986. Patented Aug. 26, 1890.

Fig. 1.

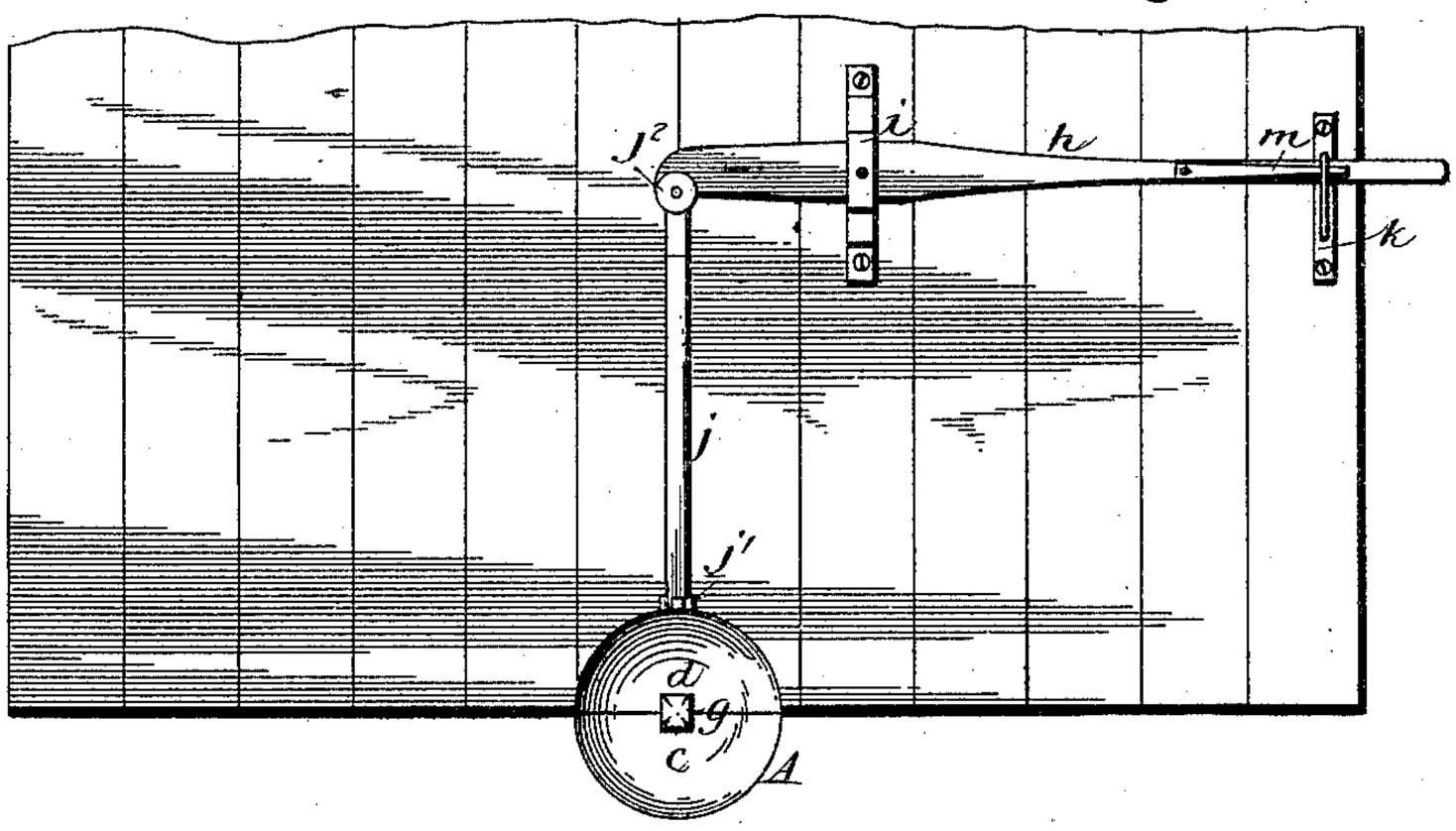

Fig. 2.

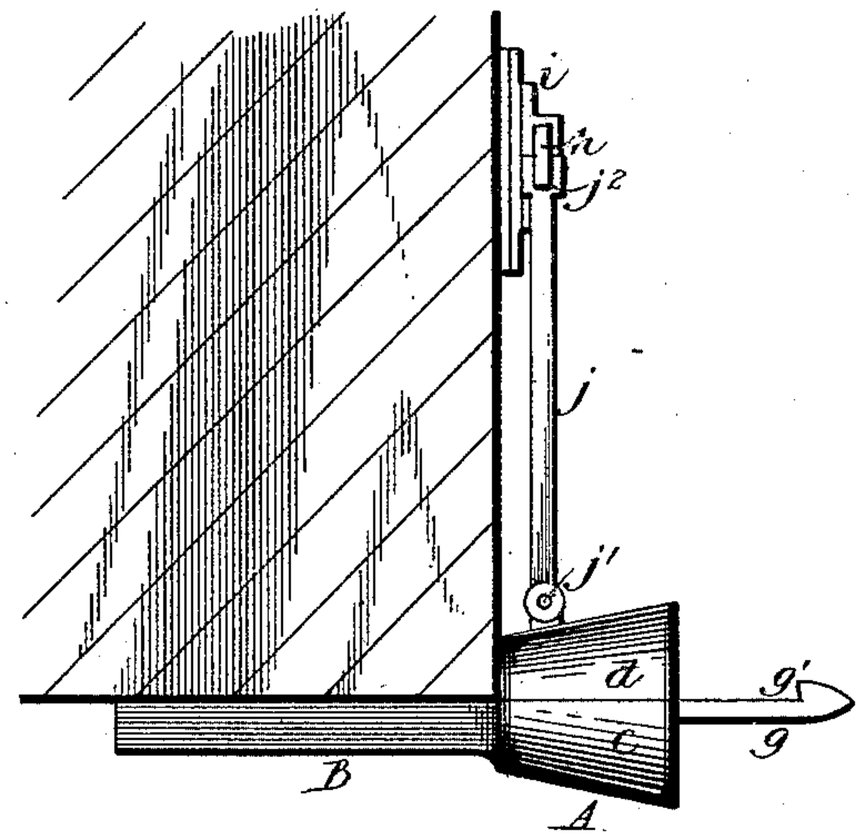

Fig. 3.

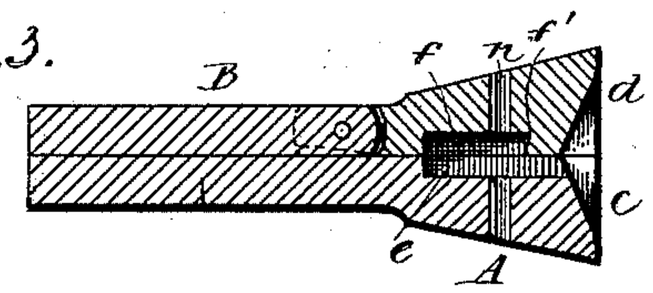

Fig. 4.

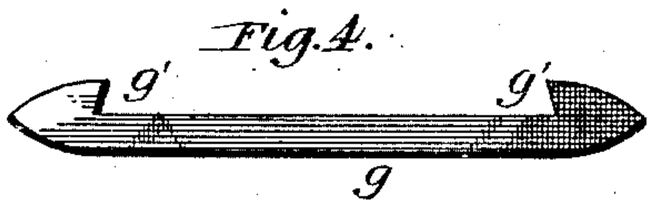

Fig. 5.

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HENRY C. HART AND CLARENCE W. STANTON, OF COHOCTON, NEW YORK.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 434,986, dated August 26, 1890.

Application filed June 21, 1890. Serial No. 356,217. (No model.)

To all whom it may concern:

Be it known that we, HENRY C. HART and CLARENCE W. STANTON, citizens of the United States, residing at Cohocton, in the county of Steuben and State of New York, have invented certain new and useful Improvements in Car-Couplers; and we 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.

Our invention relates to car-couplers, and especially to that class in which means are employed for the automatic coupling of the cars; and it consists in certain new and novel features of construction, which will clearly appear from the following description, drawings, and claims.

In the accompanying drawings, Figure 1 shows in elevation one end of a car having our improved coupler thereon; Fig. 2, a side elevation; Fig. 3, a central longitudinal vertical section of the coupler, and Figs. 4 and 5 are details.

The draw-head A is connected by means of the draw-bar B with the car in any appropriate or desired manner. This draw-head is divided centrally of its length, forming the two portions or jaws *c d*, one of which *c* is preferably made integral with the draw-bar, while the other part *d* is, as shown, hinged to the draw-bar and is adapted to rise and fall, as will presently appear. The mouth of the draw-head is concave or bell-shaped to deflect the coupling-link toward the center of said mouth. A recess *e* is formed in the lower portion *c*, which, when the parts are in their normal or closed position, is the only opening presented to the link. A recess *f* is formed in the upper portion *d*, back of said mouth, and these two recesses form the seat for one end of the link.

The coupling-link *g* is made, as shown, with the ends slightly pointed, and with the hooks *g'*, which, when in position, bear against the wall *f'* of the recess *f*.

h is a lever, which is fulcrumed in a bracket *i*, connected to the end of the car. The inner end of this lever is connected to the movable jaw *d* by means of a rod *j*, and sufficient play is allowed at the joints *j' j²* to allow for the different movements imparted to the draw-head during the act of coupling or at any other time. The outer or handle end of the lever moves in a bracket *k*, attached to the car, and is limited in its play by means of the bracket. A stop-piece *k'* is adapted to hold the lever in its raised and lowered positions, a small pin or hook *l* on the upper portion of the stop preventing the accidental displacement of the lever when the cars are coupled.

m is a spring on the lever, which is adapted to press the handle into the sockets formed by the stop *k'*.

The hole *n* in the draw-head is for a coupling-pin, which is used when it is desired to couple to a car having the ordinary link. The coupler may when desired be locked in its uncoupled condition by reason of the handle being held by the under part of the slot.

When it is desired to couple cars, the lever is released from the top of the stop and bears against the vertical side of the same. The advancing link now enters the recess *e* and forces the jaws open until the hook of the link shall have entered the recess *f*, when the jaws immediately close by gravity, and the outer end of the lever enters the notch formed by the stop *k* and hook *l*, and this securely locks the jaws together and prevents the accidental uncoupling of the cars.

We have shown the coupler adapted to be operated from the side; but it is evident that it could be so arranged as to be operated from the top as well as from either one or both sides of the car.

By our invention we are enabled to make a very cheap but effective coupler, and one that will seldom get out of order.

We claim—

1. In an automatic car-coupler, the combination of the bell-mouth draw-head formed in two parts, one of said parts being adapted to rise and fall, and both parts having the recesses therein, as described, with the coupling-link having the hooked ends, and with mechanism consisting of the lever *h*, fulcrumed as described, rod *j*, and bracket *k*, and stop *k'*, adapted to lock the jaws in their closed position and to open the jaws to uncouple, substantially as described.

2. In combination, the fixed jaw *c*, movable jaw *d*, recesses *e f* in these jaws, respectively,

lever *h*, having the spring *m*, rod *j*, bracket *k*, stop *k'*, and projection *l*, all as set forth.

3. In combination, the fixed jaw, the movable jaw, the hole therein adapted for the reception of a pin for coupling to the ordinary draw-heads, the lever *h*, rod *j*, bracket *k*, and stop *k'*, all as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY C. HART.
CLARENCE W. STANTON.

Witnesses:
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