(No Model.)

E. E. LUCE.

CAR COUPLING.

No. 301,734. Patented July 8, 1884.

Fig. 1

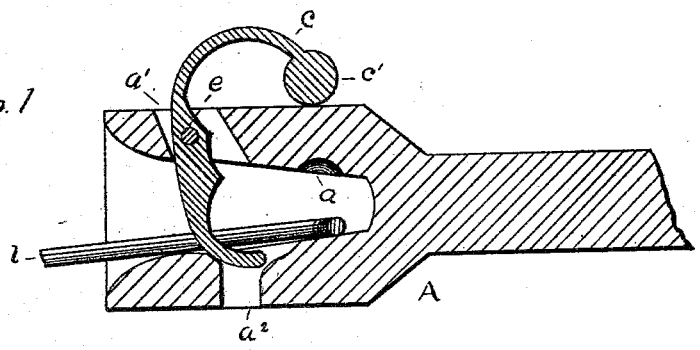
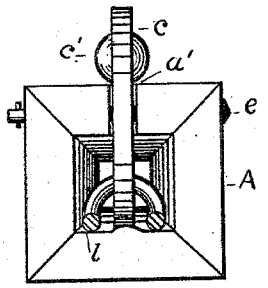


Fig. 2



WITNESSES:

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Atty.

UNITED STATES PATENT OFFICE.

EUGENE E. LUCE, OF WADENA, MINNESOTA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 301,734, dated July 8, 1884.

Application filed May 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, EUGENE E. LUCE, a citizen of the United States, residing at Wadena, in the county of Wadena and State of Minnesota, have invented a new and useful Improvement in Car-Couplings; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings.

My invention relates to that class of car-couplings in which a gravitating hook is used to hold the link within the draw-head; and my invention consists in providing a gravitating hook curved inwardly, and so pivoted within a slot in the upper part of the draw-head as to be lifted by the link when inserted in the draw-head, and to drop back in place to prevent the withdrawal of the link unless the hook be raised.

In the drawings, Figure 1 is a longitudinal section of a draw-head containing the improvement, and Fig. 2 is an end view of a draw-head with the hook and link.

A is a draw-head having a slot, a', in its upper portion. This slot may be entirely within the metal, as shown in Fig. 1, or it may be cut to the edge, as shown in Fig. 2.

c is a curved hook inserted into the draw-head through the slot a', and pivoted by a pin, e. A weight, c', is provided at its outer end, which serves to keep the lower end of the hook in place. In the lower portion of the draw-head is provided a recess or a slot, a^2, within which the lower part of the hook passes, so as to be below the surface on which the link rests. A recess, a, is also provided at the under side of the top portion of the draw-head, at the point to which the end of the hook turns when raised. The form and proportions of the hook should be such that the weight c' on its lever will insure the retention of the lower end within the recess or slot a^2; and the portion which the link presses against in entering the draw-head should be suitably rounded to enable the link freely to slide under and raise it. When the link l is inserted, the hook is lifted by it until the link has passed back of the end of the hook, when the hook drops back into the slot a^2, and thus secures the link within the draw-head.

In uncoupling, it is only necessary to lift the upper part or lever of the hook, causing its lower end to be raised above the link, when the link is free to be withdrawn.

In order that there may not be too much strain on the pin e when the link is pulled against the hook, the latter should be so fitted as to bear against the metal of both the upper and lower portions of the draw-head, as shown.

Having fully described my invention, what I desire to claim and secure by Letters Patent is—

The combination, with a draw-head having the slot a' and recesses or slots a and a^2, of the hook c, pivoted within the slot a', substantially as and for the purpose set forth.

EUGENE E. LUCE.

Witnesses:
HOWE PAIGE,
J. F. COLLOM.