

(No Model.)

J. E. SMITH.
CAR COUPLING.

No. 265,162.

Patented Sept. 26, 1882.

Fig. 1.

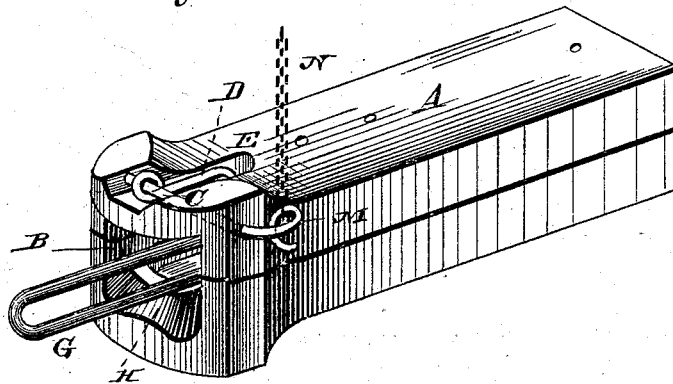


Fig. 2.

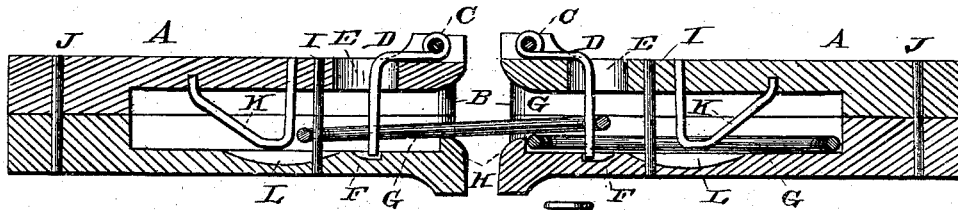
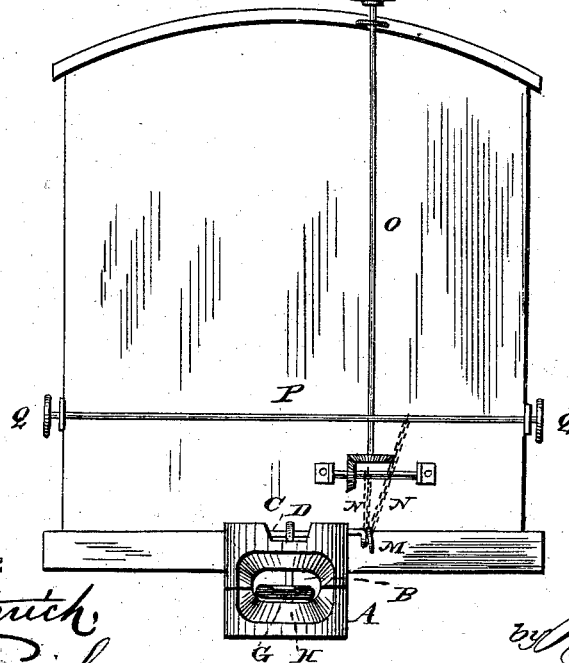


Fig. 3.



WITNESSES:

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JAMES E. SMITH, OF WILKES-BARRÉ, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 265,162, dated September 26, 1882.

Application filed March 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. SMITH, of Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Car-Couplings; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view. Fig. 2 is a longitudinal sectional view; and Fig. 3 is a front view, showing the end of a car equipped with my improved coupling.

Corresponding parts in the several figures are denoted by like letters of reference.

This invention relates to self-acting or automatic car-couplings; and it consists in certain improvements in the construction of the same which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A represents the draw-head, which is constructed with the mouth or opening B for the admission of the link.

In the upper side of the draw-head is mounted a transverse shaft, C, upon which the coupling-pin D is mounted. The coupling-pin passes through a slot, E, in the upper side of the draw-head, and extends through the mouth B into a groove or recess, F, in the under side of the latter, which permits the pin to swing back, while motion in a forward direction is prevented.

G is the link, which, when not in use, is pushed back into the mouth of the draw-head, which must be of sufficient size for its accommodation. The under side of the mouth B is provided at its front end with an inclined or beveled flange, H, which serves to retain the link in this position, and also to prevent it from being struck by the link of the opposite car in the act of coupling.

The draw-head is preferably constructed of two parts or sections, connected by vertical bolts I J, the front one of which, I, serves as a draw-bolt, as will be presently described. When the draw-head is constructed in a single piece a vertical bolt, I, must be provided, in rear of the coupling-pin and passing through the link G, which is thus permanently re-

tained in the draw-head. In rear of the pin I the mouth or recess B has upon its upper side a downward-projecting beveled or inclined stud or stop, K, and in its under side, directly under said stop, a recess or concavity, L.

The shaft C has at one end a crank, M, connected by a chain, N, with a suitable operating-lever, O, extending to the platform or to the top of the car, or with a transverse shaft, P, extending to the sides of the car, and having cranks or handles Q, or with both. By these means the device may be readily operated for uncoupling.

When, in operation, two cars are to be coupled the link G in one draw-head must be pushed back behind the flange H and that in the other draw-head be drawn out until it rests upon the flange H and its rear end abuts against the stop K, the recess L permitting it to pass in front of said stop. When the cars come together the projecting link enters the opposite draw-head, pushing back the coupling-pin, which presently drops by its own gravity, thus completing the coupling. The cars may, when desired, be connected by both links, thus making a coupling of double strength, since the cars are connected not only by the two links, but by the coupling-pin D and bolt I in each draw-head.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The draw-head A, having mouth B, transverse shaft C, coupling-pin D, slot E, recess F, flange H, bolt I, link G, stop K, and recess L, as set forth.

2. As an improvement in car-couplings, the draw-head A, constructed of two parts, the upper one of which is provided with the stop K, slot E, shaft C, and coupling-pin D, and the lower one with flange H and recesses F L, said parts being connected by bolts I J, the former of which passes through the link G, which is thus permanently secured in the draw-head, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES E. SMITH.

Witnesses:

E. S. OSBORNE,
B. M. ESPY.