(No Model.)

J. T. WILSON.

CAR COUPLING.

No. 597,699. Patented Jan. 18, 1898.

Fig. 1

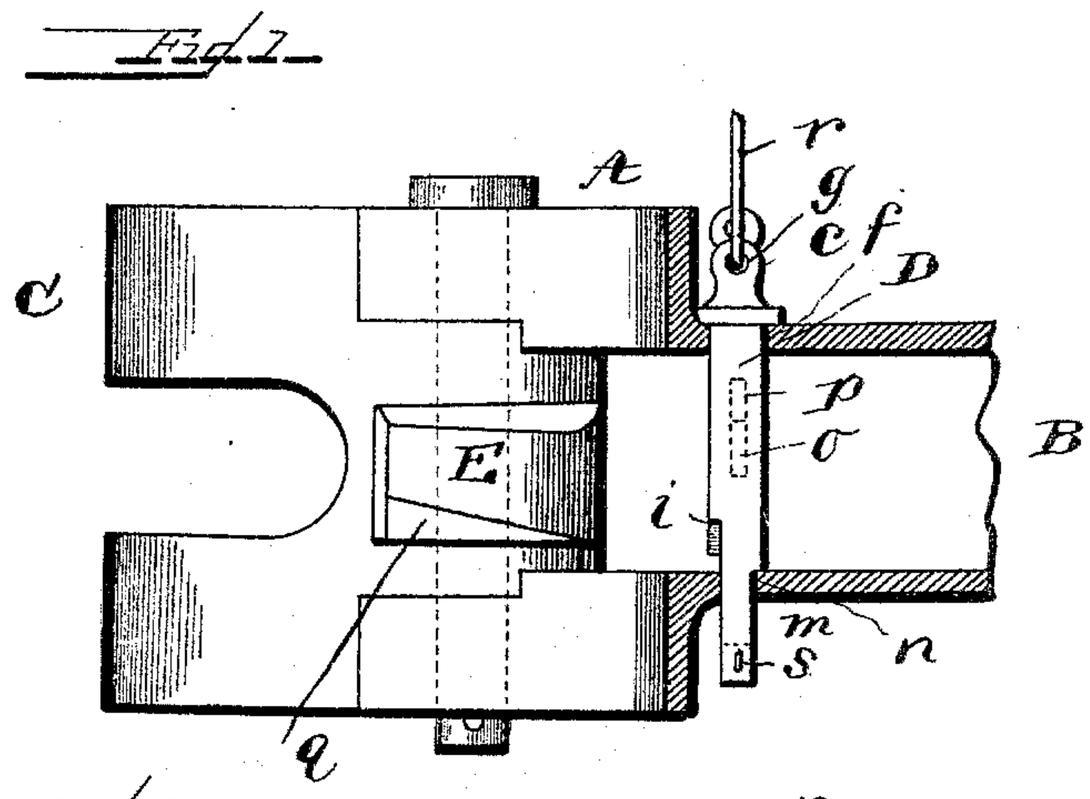


Fig. 2

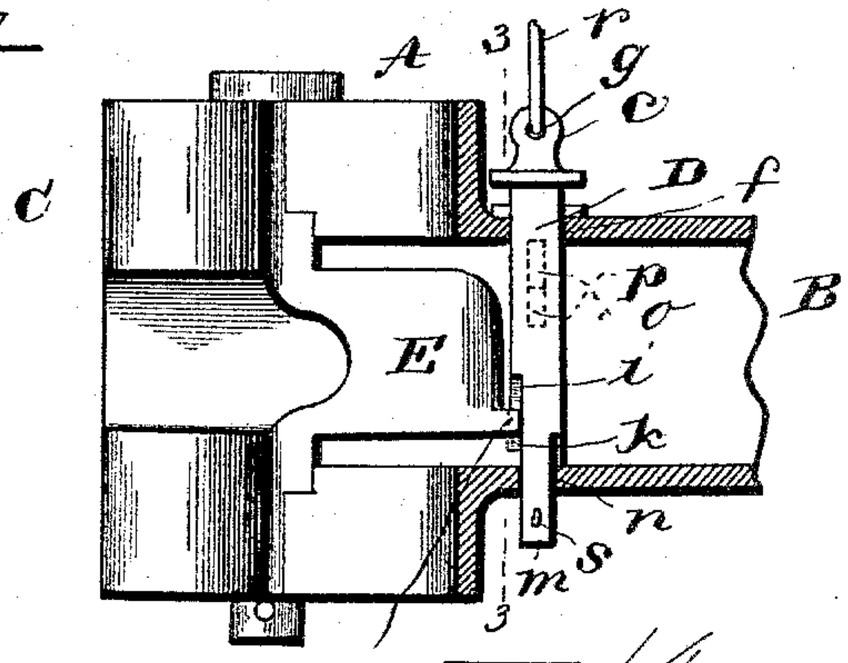


Fig. 3

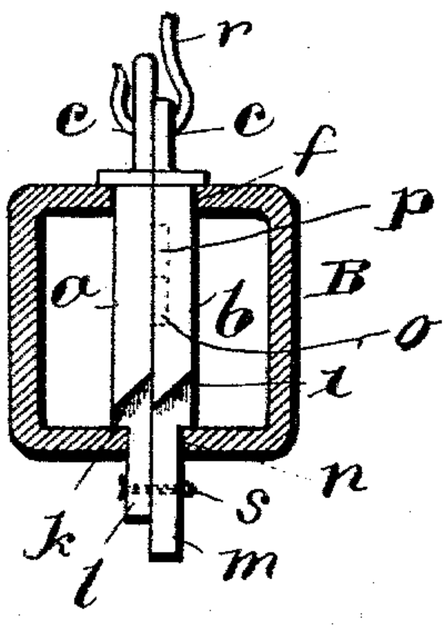
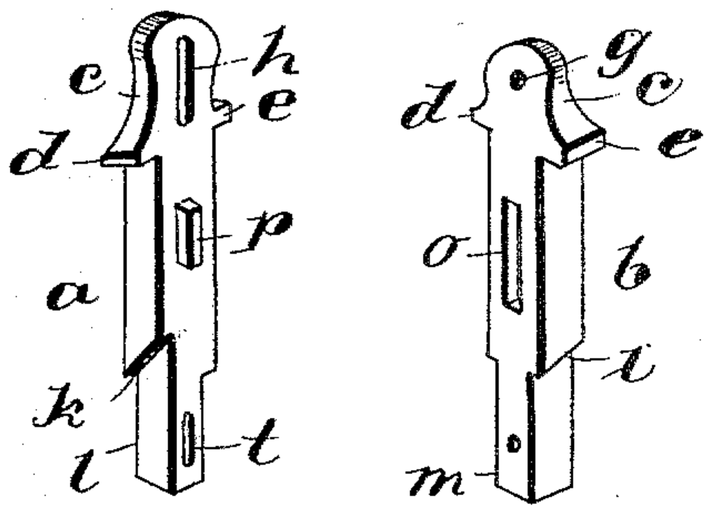


Fig. 4



Witnesses.

G. A. Rauberschmidt,

D. Mainer Reinhl.

Inventor.

John T. Wilson.

By D. E. Reinhl.

Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN T. WILSON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO H. E. PASSAVANT, OF PHILADELPHIA, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 597,699, dated January 18, 1898.

Application filed October 4, 1897. Serial No. 653,973. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. WILSON, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, 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.

My invention relates to car-couplings of the class known as the "Master Car-Builders'" type, in which each draw-head is provided with a laterally-swinging hook or jaw which engages with a like member of another draw-head, and each hook has a tongue or tailpiece which engages a vertically-movable gravity latch or pin to secure the hook in locked position, has for its object a gravity latch or pin which will prevent accidental uncoupling by the pin "jumping" or "creeping" out of engagement with the tongue or tailpiece by jolts or jars and thus permitting uncoupling of the hooks or jaws; and it consists in certain improvements in construction of the latch or pin which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a longitudinal section of part of a draw-bar, illustrating the application of my invention, with the hook or jaw open or out of engagement with the gravity latch or pin; Fig. 2, a like view showing the hook closed and the tongue locked by the gravity-pin; Fig. 3, a transverse section on line 3 3, Fig. 2; and Fig. 4, a perspective of the gravity-pin.

Reference being had to the drawings and the letters thereon, A indicates the head of a draw-bar; B, the shank or body; C, the hook or jaw, and D the gravity latch or pin, which constitutes the vital part of my invention.

The gravity latches or pins as usually constructed are liable to be displaced by a sudden jolt or jar, or they rise gradually by the motion of the tongue and the pressure thereof against the pin, producing what is known among trainmen as "creeping" of the pin, by which the tongue of the hook is released and the coupling severed between two cars. To remedy this evil, I construct the latch or pin in two equal parts *a b*, separated vertically, and each part is provided with a semihead *c*, having flanges *d e* on opposite sides, which rest upon the upper surface of the draw-bar around the slot *f* in the upper side thereof, a hole *g*, preferably circular, in the head of the part *b*, and an elongated slot *h* in the elongated head on part *a*, and on the front of the pin is an inclined shoulder *i* on part *b* and *k* on part *a*, the shoulder *i* being below the shoulder *k*, so that the two shall always be in different planes when the pin is in the draw-bar, thus preventing the two parts of the pin being raised simultaneously, and below the shoulders *i k* are tenons *l m*, which enter the slot *n* in the lower wall of the draw-bar. The part *b* is provided with an elongated groove *o* and the part *a* with a projection *p*, which enters the groove *o* and holds the two parts *a b* against lateral movement upon each other.

The tongue E of the hook C is provided on its rear surface with a projection *q*, which engages first the shoulder *i* on part *b* and raises it and then engages shoulder *k* on part *a* and raises it, while the tongue is being pushed back into the cavity in the head of the draw-bar by the hook of another coupling with which engagement is being made, and after the tongue has passed the pin and seated itself in the cavity of the head the hook is securely locked in coupled position by the pin D, engaging the front surface of the tongue in the usual manner.

The two parts of the gravity-pin move loosely one upon the other, so that a jolt or jar or the pressure of the tongue of the hook upon the pin will not cause both parts of the pin to rise at the same time, and in raising the pin the hook *r*, or ring, if used, first raises the part *b* until the shoulders *i k* coincide, when a further movement of the hook or ring raises both parts *a* and *b* together until the projection *q* has cleared the pin and the hook C has been uncoupled.

The gravity-pin D is prevented being drawn out of the slot *n* by a cotter-pin *s* in the tenon *m* of part *b*, which engages an elongated slot *t* in the tenon *l* of part *a* and is arrested by the bottom of the draw-bar.

Having thus fully described my invention, what I claim is—

1. In a car-coupling, the combination of a laterally-swinging hook and a gravity latch or pin separated vertically and provided with inclined shoulders in different vertical planes.

2. In a car-coupling, the combination of a laterally-swinging hook and a two-part gravity latch or pin separated vertically and provided with inclined shoulders in different planes on the front of the pin.

3. In a car-coupling, the combination of a laterally-swinging hook and a gravity latch or pin separated vertically and provided with inclined shoulders in different vertical planes and interlocking members to prevent lateral displacement.

4. In a car-coupling the combination of a laterally-swinging hook and a gravity latch or pin in two parallel parts each having a shoulder, one in advance of the other and constructed to be raised one in advance of the other in coupling and uncoupling.

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

JOHN T. WILSON.

Witnesses:
M. W. PARTRIDGE,
JOHN L. KAZER.