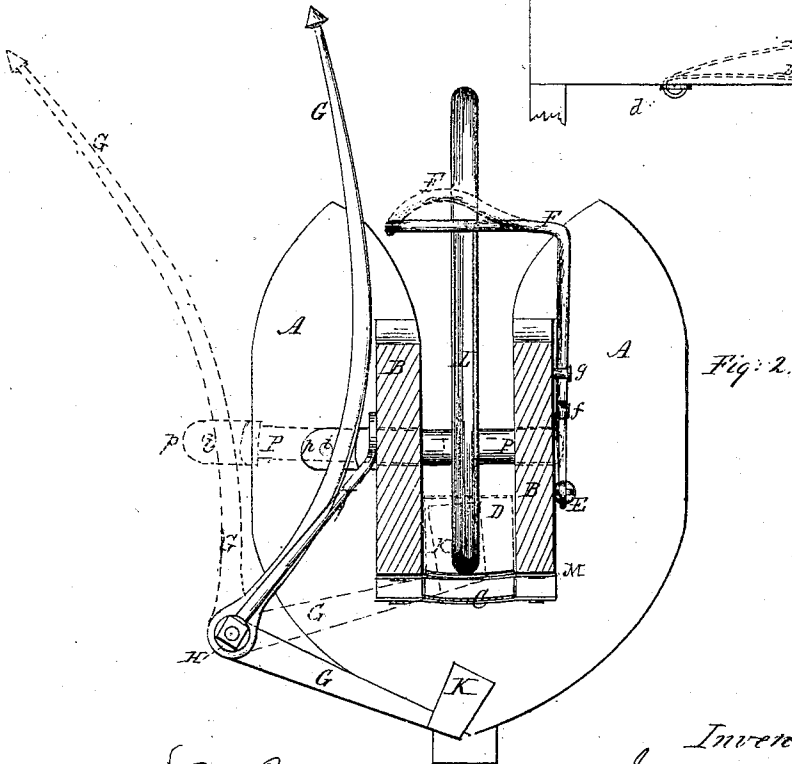
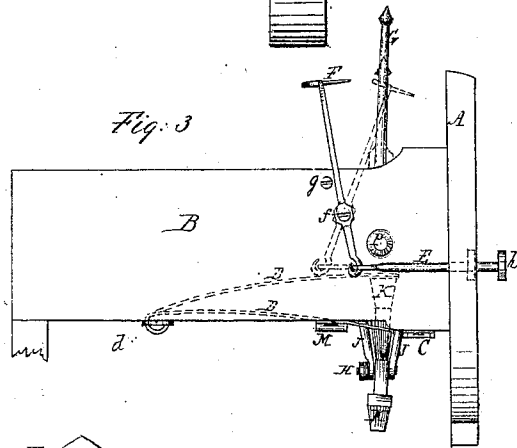
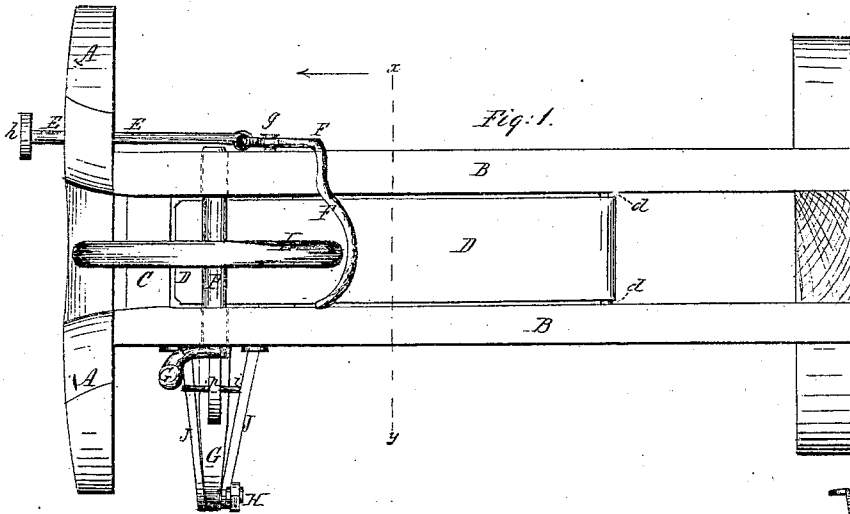


J. TEMPLE.  
Car Coupling.

No. 101,543.

Patented April 5, 1870.



Witnesses {  
A. Bradley  
W. H. Deane

Inventor  
James Temple  
By his Attorney  
Chas. F. Gansbury

# United States Patent Office.

JAMES TEMPLE, OF BELLEFONTE, PENNSYLVANIA, ASSIGNOR TO HIMSELF, WILLIAM TEMPLE, AND JOHN TEMPLE, OF SAME PLACE.

Letters Patent No. 101,543, dated April 5, 1870.

## IMPROVEMENT IN CAR-COUPPLINGS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JAMES TEMPLE, of Bellefonte, in Centre county, in the State of Pennsylvania, have invented a new and useful Car-Coupling; and I do hereby declare the following to be a full and correct description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan or top view of a draw-head, embracing my invention;

Figure 2 is a transverse vertical section of the same on line *xy* of fig. 1, looking in the direction indicated by the arrow; and

Figure 3 is a side elevation on a smaller scale.

The same letter indicates the same part wherever it occurs.

The nature of my invention consists in making the draw-head open at the top, and combining with such draw-head automatic devices for tripping the link and throwing the pin into gear, in the manner hereinafter more fully set forth.

The object of the invention is to make the coupling safe and simple, and applicable to the coupling of cars varying considerably from each other in height.

In the drawings—

A marks the face-plate of the head. Its shape is clearly shown in fig. 2, and the opening at top appears both in figs. 1 and 2.

B B mark the side pieces of the coupling frame.

A metallic strip, C, is attached to their lower edges in the position shown in fig. 1, and serves to support the lower edges of the link L when standing in the head.

Between the side pieces B B is hinged the drop-plate D, which turns on the hinge-pin *dd*. This plate when in its lowest position, rests upon plate M, (see fig. 3.)

E marks a sliding rod having a flat head, *h*, which fits a countersink in the face-plate A made to receive it.

The rear end of this rod is linked to the lower arm of the tripping-lever F, which has its fulcrum at *f*, and rests, when in the position shown in fig. 3, against the pin *g*. When the head *h* is driven back into the countersunk recess in plate A, lever F occupies the position shown by dotted lines in fig. 3.

G is the pin-lever. Its long arm is bent, as shown in fig. 2, and at the end of its shorter arm is the counterpoise K.

It has its fulcrum at H, between the lower ends of the pendent arms J J, (see fig. 1.)

There is a slot in the long arm of lever G, through which the head *p* of the coupling-pin P passes, and is held by a small pin, *i*.

The coupling-link L is shown in figs. 1 and 2, in the position it occupies when prepared for coupling.

### Operation.

When two cars are to be coupled, the link L is placed in one of the draw-heads, its upper end resting against the upper curved arm of trip-lever F, as shown in figs. 1 and 2, the pin P being passed through the link.

The opposite draw-head has the lever G thrown back into the position shown in dotted lines in fig. 2, and the drop-plate D in its highest position, supported by the counterpoise K, as shown in fig. 3.

When the two draw-heads are brought into contact, the rod E is driven back and the lever F thrown forward, when the link L is thrown down and its free end falls upon the drop-plate D of the opposite draw-head. Its weight forces the plate D downward, carrying with it the counterpoise K at the end of bent lever G. This movement throws the pin P into the opening in the link L, and completes the coupling.

To uncouple, it is only necessary to draw back the lever G, which may be done in any suitable manner.

Having thus fully described my invention,

What I claim, and desire to secure by Letters Patent, is—

1. The combination and arrangement of the bent lever G, pin P, and drop-plate D, in the manner and for the purpose described.
2. The combination of the slide-rod E and tripping lever F, in the manner and for the purpose stated.
3. The open draw-head A B, in combination with the described automatic devices for tripping the link and inserting the pin, as set forth.

The above specification of my said invention signed and witnessed at Washington this 3d day of February, A. D. 1870.

JAMES TEMPLE.

Witnesses:

WILLIAM W. DEANE,  
CHAS. F. STANSBURY.