

(No Model.)

W. BROOKING.  
CAR COUPLING.

No. 521,699.

Patented June 19, 1894.

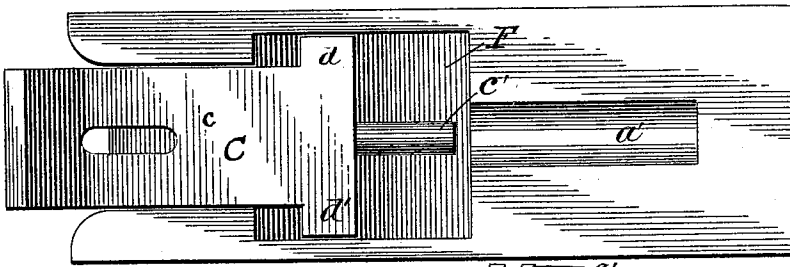


Fig. 3.

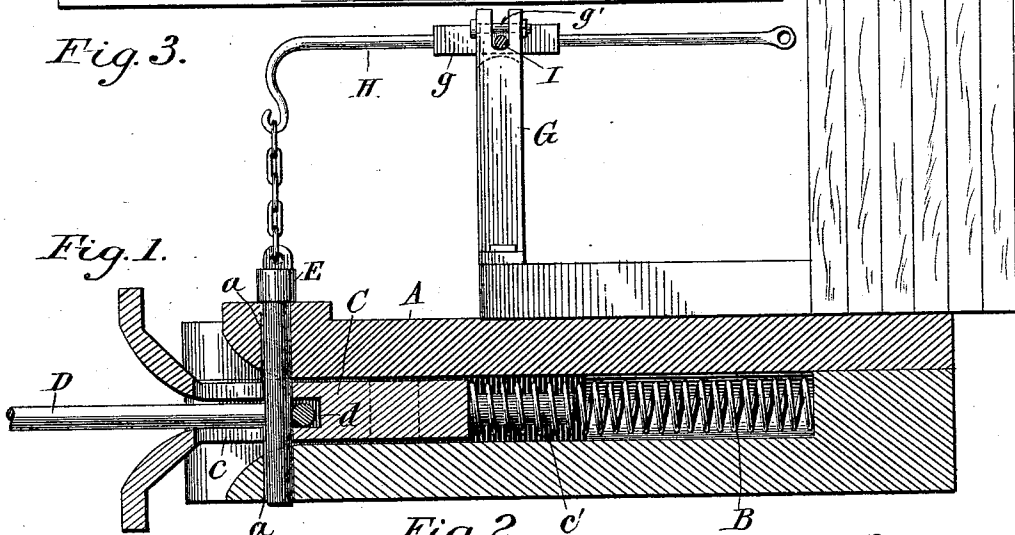
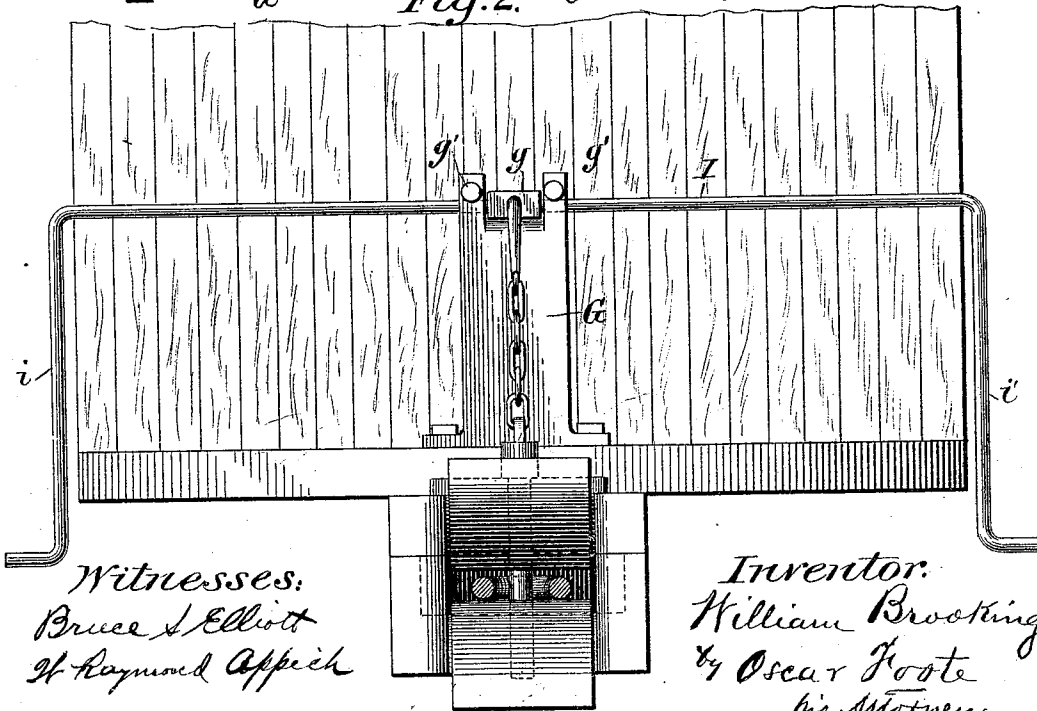


Fig. 1.

Fig. 2.



Witnesses:  
Bruce & Elliott  
H. Raymond Appich

Inventor:  
William Brooking  
by Oscar Foote  
his Attorney

# UNITED STATES PATENT OFFICE.

WILLIAM BROOKING, OF RIVER, INDIANA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 521,699, dated June 19, 1894.

Application filed November 2, 1893. Serial No. 489,886. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM BROOKING, a citizen of the United States, residing at River, in the county of Huntington and State of Indiana, have invented certain new and useful Improvements in Car-Couplers; 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 ap-  
10 pertains to make and use the same.

My invention relates to improvements in that class of car-couplers in which the link-pin drops by gravity to confine the link in the draw-head, and also to means for releasing  
15 the link-pin from engagement with the link.

My invention is fully illustrated in the accompanying drawings, in which—  
20 Figure 1 is a vertical sectional view; Fig. 2 a front view; and Fig. 3 a horizontal sectional view.

A indicates the draw-head, having in its rear portion a recess, *a'*, for the reception of a spring, B.

C indicates a spring-actuated sliding block, having the usual flared opening leading to a recess, *d*, for the reception of one end of the link, D, and provided with a slot, *c*, through which the pin, E, falls, in the operation of the device. The block, C, has an extension, *c'*, at its rear end, which supports one end of the spring, B, the other end bearing against the rear wall of the recess, *a'*.

The draw-head, A, is provided with a hole, *a*, extending vertically through it, in which the link-pin, E, slides, and which is adapted to register at the proper time with the hole, *c*. The draw-head also has an enlarged recess, F, toward its forward end to provide space for projections, *d, d'*, on the rear of the sliding block, C, the forward part of the recess F, acting as a stop to receive these projections and thus limit the forward play of the sliding block. Extending from the draw-head is an upright, G, the upper end of which is bifurcated horizontally and laterally to provide suitable bearings for levers, H and I, which extend at right angles to each other. Where these levers cross each other they are joined together by means of a block, *g*, of metal, or other suitable material, which thus  
50 forms a bearing for the levers, and serves to greatly strengthen them at the point of con-

nection. The levers are held in place by bolts, *g'*, passing through the upright, G. Under this arrangement, the block, *g*, bolts *g'*, lever, I, and the bottom of the groove in which the block, *g*, rests, operate as a stop to prevent the pin from being drawn entirely from the draw-head. The forward end of the lever, H, is bent downward, and connected in any suitable manner with the link-pin, E. The lever, I, has the downwardly projecting portions, *i, i'*.

As illustrated in the drawings, the cars are shown as coupled.

In operation, to uncouple the cars, the operator manipulates the lever H, or I, to raise the link-pin from engagement with the link. The spring B at once pushes the block, C, forward, until the projections, *d, d'*, strike the end of the recess F, leaving the link-pin resting on the rear, solid portion of the sliding block, C. When the cars are to be coupled the link, D, presses in the sliding block against the resistance of the spring, until the openings *a* and *c* register, when the link-pin will drop automatically and confine the link against withdrawal.

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

1. In a car-coupler, the combination with the draw-head having a link-pin hole, and of the link and pin, of means for raising the link-pin from engagement with the link, comprising an upright, G, having lateral and longitudinal bifurcations in its upper end, levers supported in said bifurcations and extending at right-angles to each other, a block, *g*, joining said levers and having a bearing in one of the bifurcations, and bolts, *g'*, for retaining the levers in position, the combination being and operating substantially as and for the purpose set forth.

2. In a car-coupler, the combination with the draw-head having a link-pin hole, a sliding block working in prescribed limits within the draw-head and having a recess in its outer end, a link adapted to rest in said recess, and a pin adapted to pass through the draw-head and the said block, of mechanism for raising the said pin out of engagement with the link comprising an upright having lateral and longitudinal bifurcations in its upper end, levers

supported in said bifurcations and extending at right angles to each other, a block joining said levers and having a bearing in one of the bifurcations, and bolts for retaining the  
5 levers in position, substantially as described.

3. In a car-coupler, the combination with the draw-head having a link-pin hole, a sliding block working in prescribed limits within the draw-head and having a recess in its outer  
10 end, a spring located in the draw-head and exerting an outward pressure on the block, a link adapted to rest in said recess, and a pin adapted to pass through the draw-head and the said block, of mechanism for raising the

said pin out of engagement with the link 15 comprising an upright having lateral and longitudinal bifurcations in its upper end, levers supported in said bifurcations and extending at right-angles to each other, a block joining said levers and having a bearing in one of the  
20 bifurcations, and bolts for retaining the levers in position, substantially as described.

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

WILLIAM BROOKING.

Witnesses:

J. FRED FRANCE,

H. W. CORY.