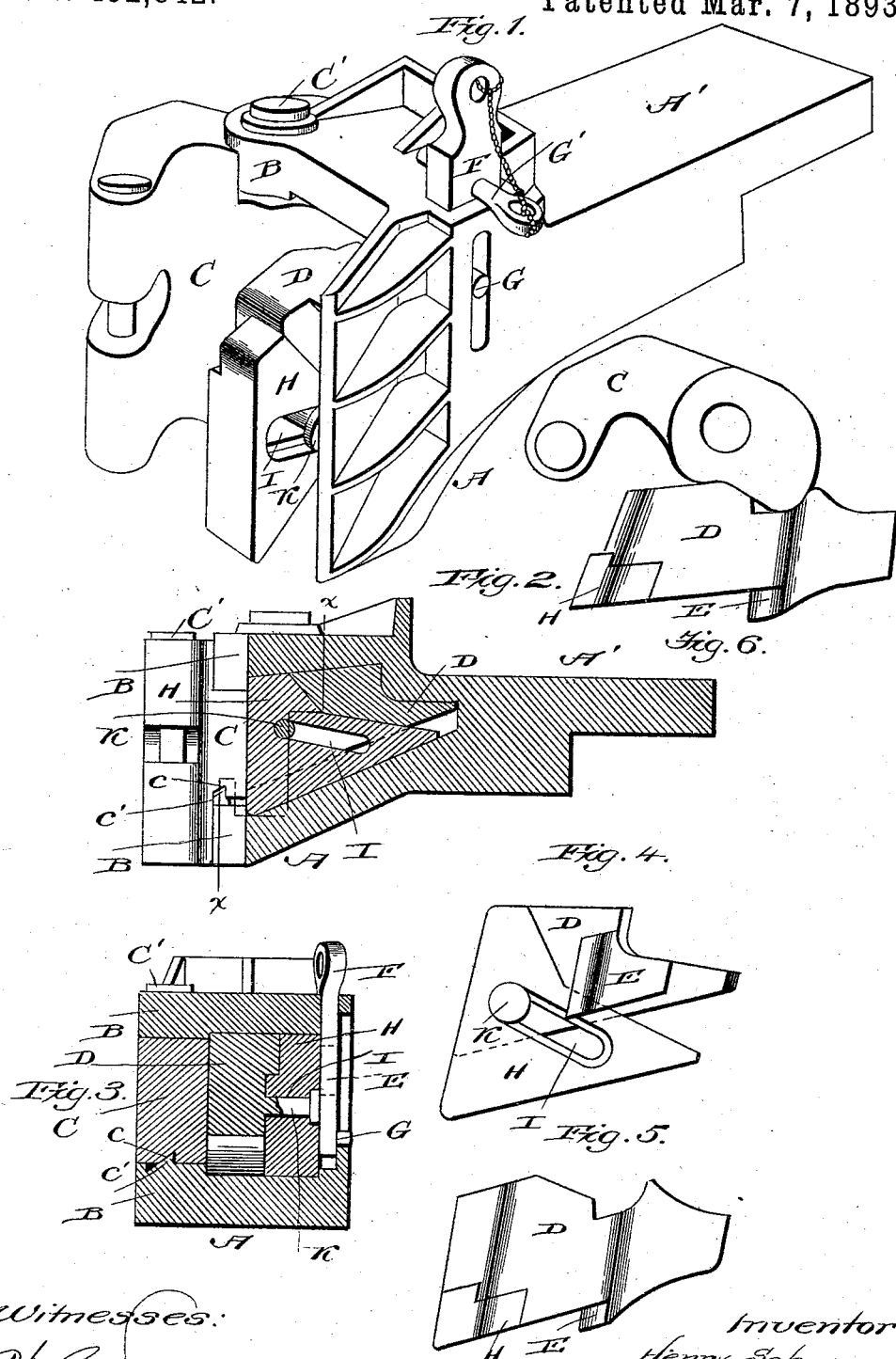


(No Model.)

H. SCHREYER.  
CAR COUPLING.

No. 492,842.

Patented Mar. 7, 1893.



Witnesses:  
*W. C. Sullivan*  
*Arthur L. Bryant*

Inventor:  
Henry Schreyer.  
By *Edwin Brind*  
Att'y's.

# UNITED STATES PATENT OFFICE.

HENRY SCHREYER, OF TOLEDO, OHIO.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 492,842, dated March 7, 1893.

Application filed September 16, 1892. Serial No. 446,097. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY SCHREYER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have  
5 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  
10 appertains to make and use the same.

My invention relates to improvements in automatic car couplers and it consists in the peculiar construction and arrangement of parts as will be hereinafter fully pointed out  
15 and claimed.

In the accompanying drawings—Figure 1 is a perspective view of a coupler constructed in accordance with my invention showing the same open. Fig. 2 is a vertical longitudinal  
20 sectional view through the coupler showing the parts closed or locked. Fig. 3 is a vertical sectional view on the line  $x-x$  of Fig. 2. Figs. 4 and 5 are detail views of the retaining block. Fig. 6 is a detail plan view of the rear  
25 end of the movable jaw and the retaining block.

Like letters of reference denote corresponding parts in the several figures of the drawings, referring to which—

30 A designates the draw head and A' the draw bar which may be of any suitable size and material. The draw head A is provided at one side with parallel overhanging lugs B between which is fitted the reduced tail piece  
35 of the movable jaw C and said jaw is held in place by a pivot pin C'. On the lower surface of the tail piece of the jaw C is formed a cam or incline  $c$  which rests against or on an oppositely arranged incline  $c'$  formed on the  
40 upper surface of the lower lug B of the drawhead A. The floor or bottom of the drawhead is inclined downwardly from its inner to its outer end, as shown in Fig. 2, and on said inclined surface is arranged a retaining  
45 block D which is provided in one side, near its rear end, with a recess designed and adapted to receive the rear end of the tail piece of the movable jaw C of the coupler. On the opposite side of the block D is formed an integral  
50 lug E which extends into a way formed in the side wall of the drawhead. The upper sur-

face of the lug E is inclined downwardly from its rear to its forward side and on said inclined top rests, when the movable jaw is in the position shown in Fig. 1, the lower end of  
55 a vertically movable locking slide F. The slide F extends through a suitable aperture in the top of the drawhead and said slide is provided in its outer face with a projecting stud or pin G which works in a vertical slot  
60 formed in the side of the drawhead. The upper end of the locking slide F is shaped so as to be conveniently grasped by hand and is provided near its upper end with an opening or aperture through which a lifting bar or  
65 any suitable implement can be passed when it is desired to raise said slide without passing between the adjacent ends of two cars. In the slide F is also formed a pin passage or  
70 aperture designed to receive a pin G' by means of which said slide can be held slightly elevated.

The forward portion of the retaining block on the same side as the lug E is cut away and in such reduced portion is fitted an adjust-  
75 ing plate H, substantially triangular in shape and in said plate is formed an inclined slot I into which a headed pin K rigidly attached to the block D extends so that the block D and plate H can be moved longitudinally one  
80 on the other. As shown in the drawings, the plate H projects or extends above the block D at its forward end when the movable jaw C is open and as said plate is forced rearwardly in the drawhead it operates to  
85 move the retaining block both upwardly and rearwardly.

In the forward end of the movable jaw C is formed a recess or slot adapted to receive one end of a coupling link in case it is de-  
90 sired to employ my improved coupler with the ordinary pin and link coupling.

The operation of my invention may be briefly stated as follows:—When two cars, provided with my improved coupling come  
95 together, the movable jaw of one coupler enters the space in the other coupler between the fixed and movable jaw and comes in contact with the forward end of the adjusting plate H. The adjusting plate is forced rear-  
100 wardly along the inclined bottom of the drawhead and by such rearward movement the re-

taining block D is also forced rearwardly and upwardly and the swinging jaw C caused to swing or turn inwardly on its pivot. The block D is pushed rearwardly in the draw head sufficiently far to enable the lug E carried thereby to pass from under the vertically movable locking slide F which falls, by gravity, in advance of the lug E and holds the block D and jaw C firmly in place. To uncouple the cars it is only necessary to raise the slide F far enough to clear the upper edge of the lug E when the movable jaw C will automatically swing open and the block D and plate H be moved into the positions shown in Fig. 1. The forward motion of the movable jaw is aided by the oppositely arranged inclines  $c, c'$ .

When it is desired to employ my improved coupler in connection with an ordinary pin and link coupling the pin G is withdrawn from the aperture in the locking slide to permit said slide to fall and lock the movable jaw firmly in place. The coupling link can then be inserted in the recess provided for that purpose in the forward end of the movable pin and held in place by a coupling pin of ordinary form. It will be noticed that the pin G' is connected to the locking slide by a short chain.

I am aware that changes in the form and proportion of parts and details of construction of the devices herein shown and described as an embodiment of my invention can be made without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes and alterations as fairly fall within the scope of the same.

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

1. In a car coupler, the combination of a drawhead, a movable jaw pivotally connected to the drawhead, a retaining block arranged in the drawhead and engaging with the rear end of the movable jaw, an adjusting plate carried by the retaining block, and a verti-

cally movable slide adapted to hold said block firmly in place, substantially as described.

2. In a car coupler, the combination of a drawhead, a movable jaw, a retaining block engaging with the rear end of the movable jaw and provided on one face with an integral lug, a vertically moving locking slide and an adjusting plate carried by the retaining block and adapted to move the same to bring the lug thereon in rear of the locking slide, substantially as described.

3. In a car coupler, the combination of a drawhead, a movable jaw, a retaining block engaging with the rear end of the movable jaw and provided on one face with an integral lug, a plate carried by said block and adapted to move the same rearwardly and upwardly and a vertically movable locking slide provided with a stud or pin which works in a vertical slot in the side of the drawhead, substantially as described.

4. In a car coupler, the combination of a drawhead provided with an inclined bottom, a movable jaw, a retaining block arranged within the drawhead and engaging with the rear end of the movable jaw, a vertically movable locking slide and an adjusting plate connected to the retaining block by a pin and slot connection and adapted to move said block in the drawhead to bring a lug thereon in rear of the locking slide, substantially as described.

5. In a car coupler, the combination with a drawhead and movable jaw, of a retaining block engaging with the rear end of the movable jaw, a locking slide and a longitudinally movable adjusting plate adapted to move the retaining block rearwardly and upwardly by means of coacting inclines arranged between said block and plate, substantially as described.

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

HENRY SCHREYER.

Witnesses:

PHILIP J. SCHREIBER,  
C. S. CURTIS.