(No Model.) 2 Sheets—Sheet 1.

W. WALLACE.

COMBINED CAR COUPLING AND BUMPER.

No. 526,796. Patented Oct. 2, 1894.

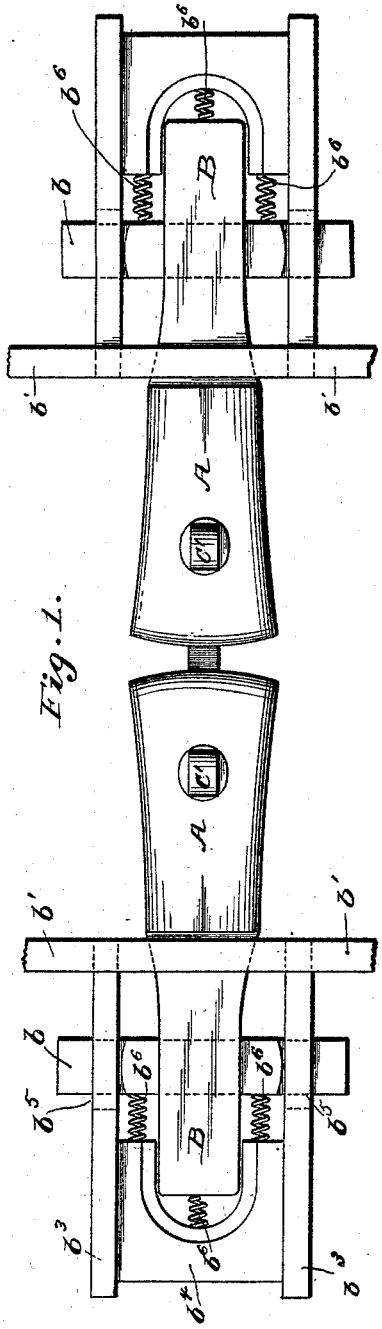


Fig. 1.

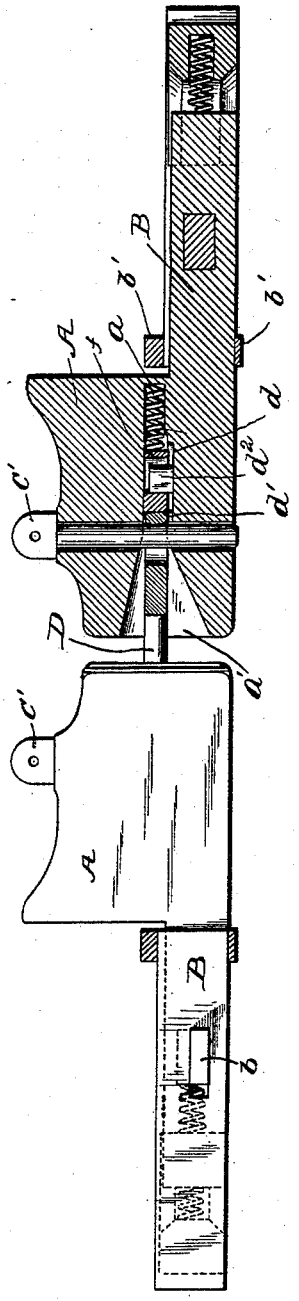


Fig. 2.

Witnesses:

Walter Famariss

Rose E. Rabbitt.

Inventor:

William Wallace.

By John S. Duxpie

Attorney.

(No Model.) 2 Sheets—Sheet 2.

W. WALLACE.

COMBINED CAR COUPLING AND BUMPER.

No. 526,796. Patented Oct. 2, 1894.

Fig. 3.

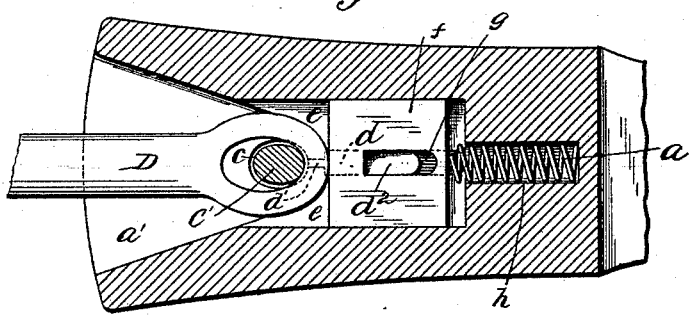


Fig. 4.

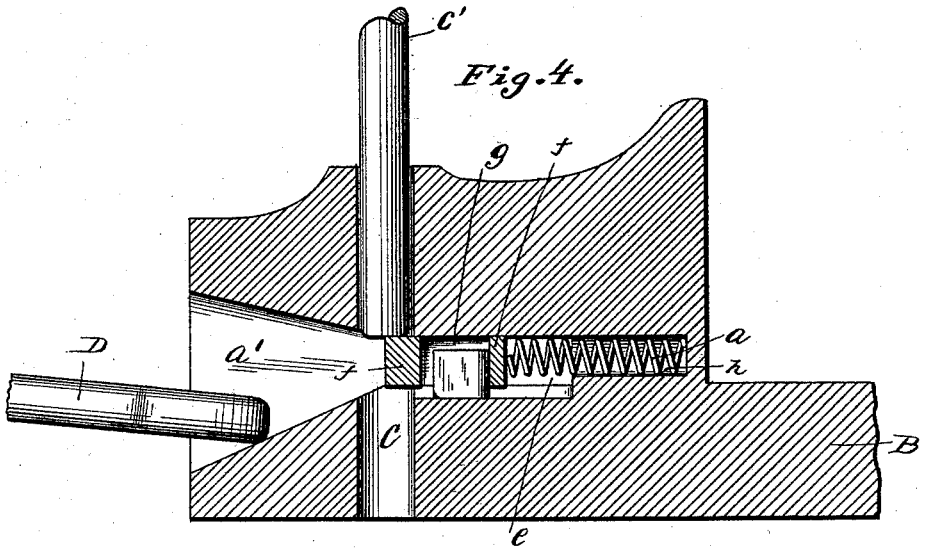
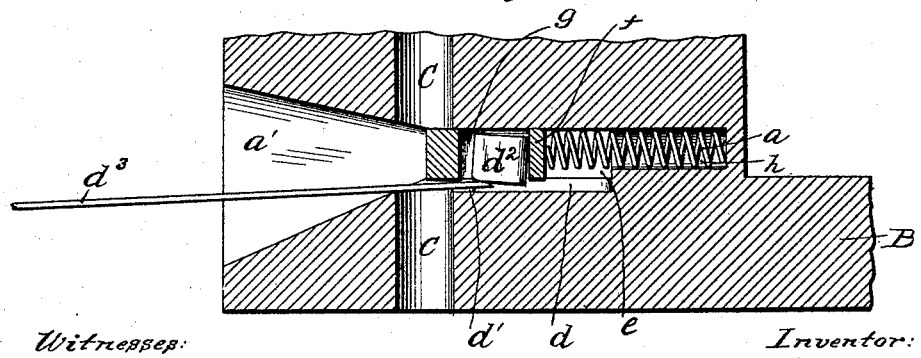


Fig. 5.



Witnesses:
Walter Famariss
Rose E. Robbett.

Inventor:
William Wallace.
By John S. Sheppe
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM WALLACE, OF PEORIA, TEXAS, ASSIGNOR OF ONE-HALF TO DAVID CLARKSON McMASTERS, OF SAME PLACE.

COMBINED CAR COUPLING AND BUMPER.

SPECIFICATION forming part of Letters Patent No. 526,796, dated October 2, 1894.

Application filed March 29, 1894. Serial No. 505,575. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM WALLACE, a citizen of the United States, residing at Peoria, in the county of Hill and State of Texas, have invented certain new and useful Improvements in a Car Coupler and Bumper Combined; 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 is a new "automatic car coupler," with necessary bumper attachments; and consists in the novel construction and arrangement of its parts, hereinafter set out in this specification and the claims thereunto attached.

In the accompanying drawings: Figure 1 is a top plan view. Fig. 2 is an elevation, one half being in longitudinal section. Fig. 3 is a horizontal longitudinal sectional view of the draw-head, showing a top plan view of its internal parts. Fig. 4 is a longitudinal sectional view of the draw-head in elevation. Fig. 5 is a longitudinal sectional view of the draw-head in elevation (the top cut away) with a lever inserted in the throat.

My invention is described as follows:

A and A, represent the two draw-heads which are constructed exactly alike.

B and B, represent the tails of the draw-heads.

Each of the draw-heads is made in one solid piece. The throats a, of the draw-heads are in the usual shape, running back nearly to the rear of the upper part of the draw-heads and widening to mouths a', at their front ends. Running perpendicularly through said draw-heads and just where the mouth ends and the throat begins, is a coupling pin perforation c, through which operates a coupling pin c'. Said pins are each provided with a perforated head so that they may be linked to the end of the coach, if desired, to keep them from being lost, or the perforation may be used for other purposes, or for that and other purposes. In the lower face of each draw-head is cut a slot d, about one-fourth or one-half an inch deep, narrowing into a much narrower slot d', being the same depth, however, of the slot d, and opening in the mouth a'. In said slot is set a lock-block d^2, which is not so long as the said slot, and therefore is able to play backward and forward in said slot. The lower front corner of said block is beveled leaving room for the beveled end of a lever d^3, to pass under said block and raise it, so that it may slip out of the draw-head (Fig. 5).

Just in rear of the mouth of the draw-head is a recess e, (Figs. 3, 4 and 5) in which loosely but neatly fits a pin-seat f, and through the center of said pin seat is a mortise hole g, large enough to receive the said lock-block d^3. In the rear of said pin-seat is a spiral spring h, the rear end of which fits into the throat a, while its front end presses against the rear end of the pin-seat f, and pushes it forward until its front end covers up as much as one-half of the pin hole c, the front face of the lock-block d^2, impinging against the front walls of the slot d, and its rear face impinging against the rear wall of the mortise opening g, of said pin-seat (Fig. 4), prevents the said pin-seat from being pushed farther forward, and while in this position the pin c', is put down into the pin-hole c, and rests on the upper face of said pin-seat. When the cars come together the approaching link D, enters the mouth of the draw-head, pushes back the said pin-seat and the coupling pin drops through the link. The link may be made after any style, provided it has an opening through its front end, substantially as shown in Fig. 3. When the coupling pin is withdrawn the said spiral spring h, returns the said pin-seat to its normal condition, as shown in Fig. 4. When from any cause, breakage or otherwise, it is desired to remove the said pin-seat or coil spring, a bar d^3, beveled at one end is thrust through the narrow slot d', and under the lock-block d^2, until its lower end is raised even with the flush of the face of the recess e, when the spring h, immediately pushes it and the spring seat out into the mouth of the draw-head, whence they may be easily removed.

Each of the draw-heads is provided with a tail B, through which is horizontally secured a bar b. To the tail B, of said draw-head is secured a frame having a front bar b', through

an opening in which plays back and forth said tail. Secured to said bar and running back therefrom are side bars b^3, having secured between their rear ends a block b^4. Said side bars b^3, are provided with elongated mortise openings b^5, in which the ends of the bar b, play back and forth. Said draw-head is held forward by means of spiral springs b^6, so that when the bumpers come together they form a cushion to the stroke.

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

1. In an "automatic car coupler," the combination of the draw-head A, provided with the throat a, mouth a', recess e, and coupling pin hole c, and in the bottom of said recess a slot d, terminating in a narrow slot d', which opens into the mouth of said draw-head; lock-block d^2, fitting in and adapted to play back and forth in slot d; pin-seat f, adapted to fit in and play back and forth in recess e, and provided with a mortise hole to receive lock-block d^2; spiral spring h, fitting in the throat a, and holding said pin-seat forward, until its front end partly covers the coupling pin-hole c; coupling pin c', adapted to rest on the front end of said pin-seat and drop through the link D, when said pin-seat is pushed back, substantially as shown and described and for the purposes set forth.

2. In an "automatic car coupler," the combination of the draw-head A, provided with the throat a, mouth a', recess e, and coupling pin hole c, and in the bottom of said recess a slot d, terminating in a narrow slot d', which opens into the mouth of said draw-head; lock-block d^2, having the beveled lower front corner, fitting in and adapted to play back and forth in slot d; pin-seat f, adapted to fit in and play back and forth in recess e, and provided with a mortise hole to receive lock-block d^2; spiral spring h, fitting in the throat a, and holding said pin-seat forward, until its front end partly covers the coupling pin-hole c; coupling pin c', adapted to rest on the front end of said pin-seat and drop through the link D, when said pin-seat is pushed back, substantially as shown and described and for the purposes set forth.

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

WILLIAM WALLACE.

Witnesses:
LOYD WALLACE,
JAMES DUNLAP.