(No Model.)

## W. GREENWADE. CAR COUPLING.

No. 438,151.

Patented Oct. 14, 1890.

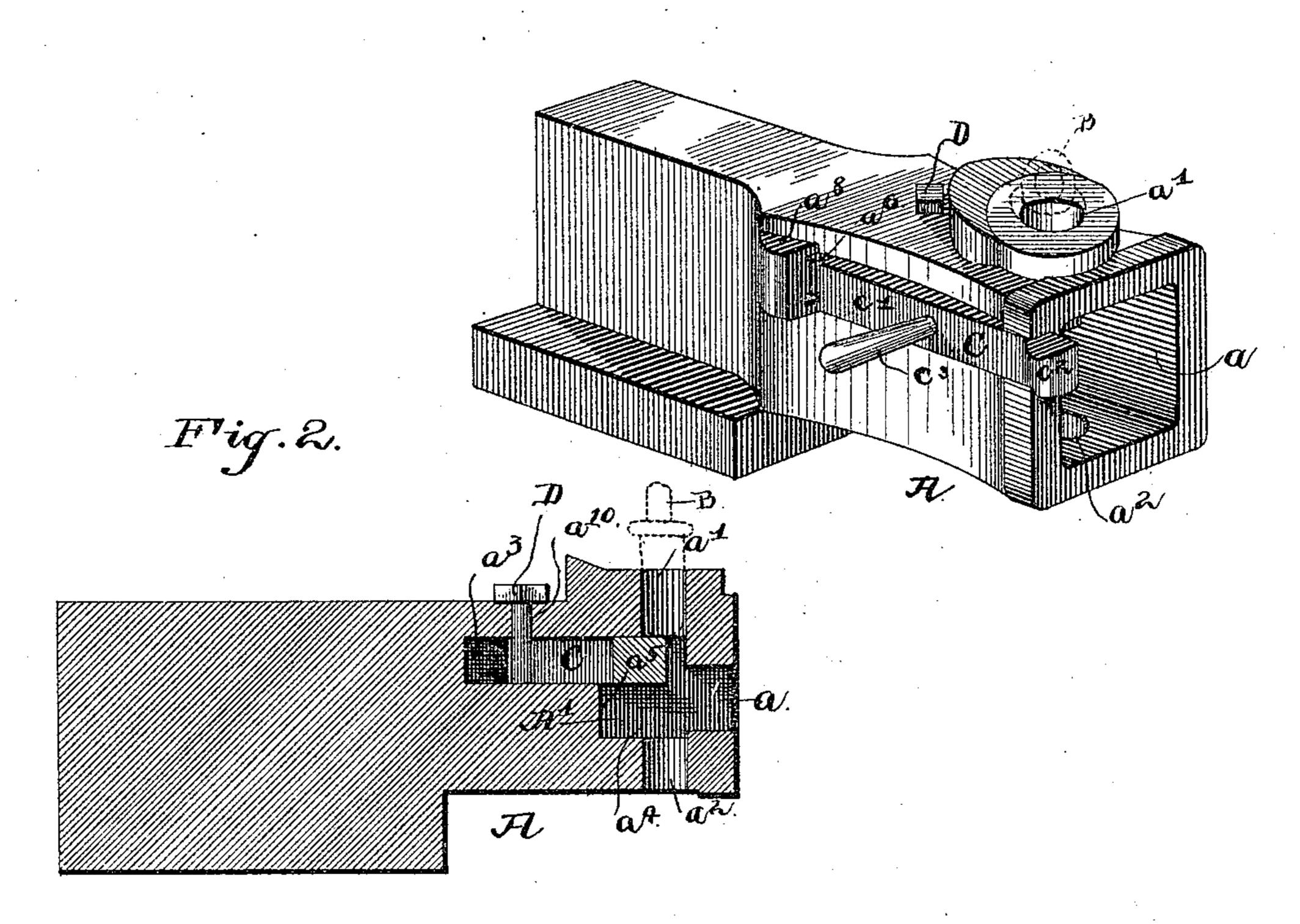


Fig. 3.

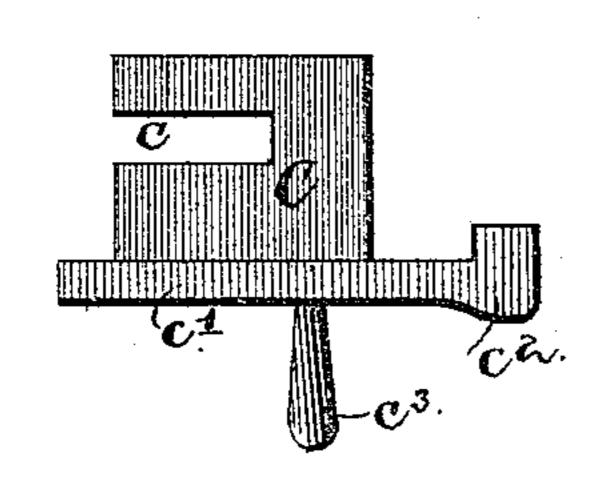
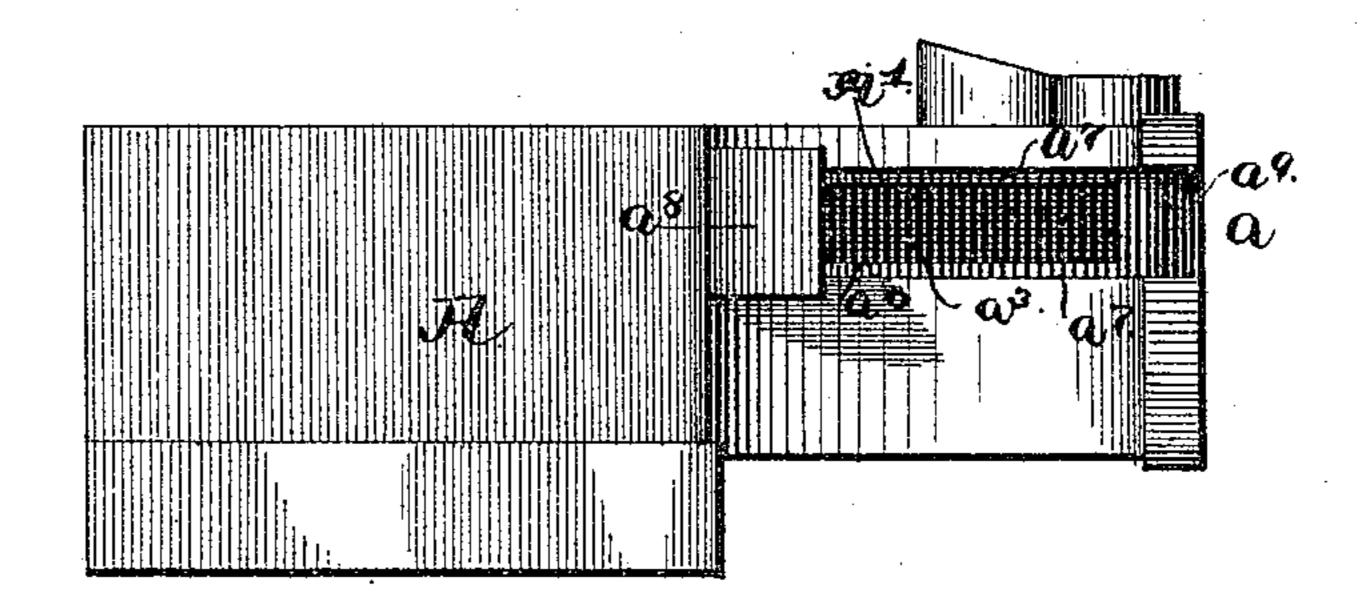


Fig. 4.



Witnesses

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## United States Patent Office.

WILLIAM GREENWADE, OF ASH GROVE, MISSOURI.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 438,151, dated October 14, 1890.

Application filed June 14, 1890. Serial No. 355,508. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM GREENWADE, a citizen of the United States, residing at Ash Grove, in the county of Greene and State of Missouri, have invented a new and useful Car-Coupling, of which the following is a specification.

My invention is an improvement in carcouplings, and has for its object to provide a
coupling which will have a pin-support so
constructed that it will not readily get disordered, which will be simple and cheap of
construction.

With these objects in view the invention resides in the various novel details of construction, and in the combination of parts, hereinafter fully described, illustrated in the drawings, and particularly pointed out in the claims.

In the drawings illustrating my invention, forming part of this specification, throughout which like letters of reference indicate corresponding parts, Figure 1 is a view in perspective of my car-coupling. Fig. 2 is a vertical longitudinal section of the draw-head. Fig. 3 is a detail view of one of the parts; and Fig. 4 is a side elevation of the draw-head, the pinsupport having been removed.

In the drawings, A designates a draw-head provided with the usual flaring mouth a, the pin-openings a' and  $a^2$  above and below, through which the pin B is placed.

A' designates the recess in the draw-head, into which the flaring mouth  $\alpha$  opens. This 35 recess A', when the parts yet to be described have not been placed therein, is of an L shape, the longer arm  $a^3$  of the L being horizontal, and the shorter arm  $a^4$  depending vertically therefrom, the draw-head A at the bend of 40 the  $\bot$  forming a shoulder  $a^5$ , against which the link strikes when it enters the recess. The arm  $a^3$  of this L-shaped recess A' is extended laterally on one side through the drawhead, forming a slot  $a^6$  therein. The edges 45 of this slot are cut away squarely to form ways  $a^7$ , in which works a slide to be hereinafter described. The rear end of the slot  $a^6$ is provided with a shoe  $a^8$ , which receives the end of the slide and limits its movement 50 therein. The slot  $a^6$  ends behind the mouth of the draw-head; but the ways  $a^7$  are conwherein a shoulder  $a^9$  is provided.  $a^{10}$  is a bolt-opening in the draw-head on its upper side extending downward to the recess A'.

C is a pin-support having a longitudinal opening c, and being provided with the slide c', adapted to fit the ways  $a^7$ . This slide c'has an enlarged end  $c^2$ , adapted to abut against the shoulder  $a^9$ . It also has a handle  $c^3$ . This 60 pin-support C is adapted to fit within the slot  $a^6$  and rest in the horizontal longer arm  $a^3$  of the recess A', and is retained in position therein by means of the bolt D, which passes through the bolt-hole  $a^{10}$  in the draw-head 65 and engages the pin-support C by passing through the longitudinal opening c. The pinsupport is longitudinally adjustable, and when its forward end is below the pin-opening a' the end  $c^2$  of the slide c' projects be- 70 yond the face of the draw-head.

From the foregoing description it will be evident that in order to set my improved coupling all that is necessary is to raise the pin B. Then by means of the handle  $c^3$  push 75 the pin-support C forward until its front end will support the pin B. The end  $c^2$  will now project beyond the face of the draw-head A. When another draw-head carrying a link approaches my improved coupling thus set, the 80 link will pass beneath the pin B until it strikes the shoulder  $a^5$ . Shortly before the link strikes the shoulder  $a^5$  the face of the approaching draw-head will strike the projecting end  $c^2$  and drive the pin-support C 85 back until the faces of the draw-heads meet. The slide is stopped by the shoulder  $a^9$  and the shoe  $a^8$ . During this operation the pin drops by its own weight and the act of coupling is complete.

At present I prefer in practice to make the pin-support C fit the horizontal longer arm  $a^3$  of the recess A' rather snugly, or else to coat the sides of the two with a gummy substance, in order that slight jars may not throw 95 the pin-support out of place.

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

end of the slide and limits its movement therein. The slot  $a^6$  ends behind the mouth of the draw-head; but the ways  $a^7$  are continued forward to the face of the draw-head,

projects beyond the face of the draw-head, as

and for the purpose set forth.

2. In a car-coupling, the combination of a longitudinally-sliding horizontal pin-support with a slide adapted to move in ways upon the side of the draw-head and having an enlarged end adapted to rest in a shoulder at the forward part of the ways, the other end of the slide being adapted to fit within a shoe, substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM × GREENWADE.

Witnesses:

C. F. DAUGHERTY, H. L. ROBERTS.