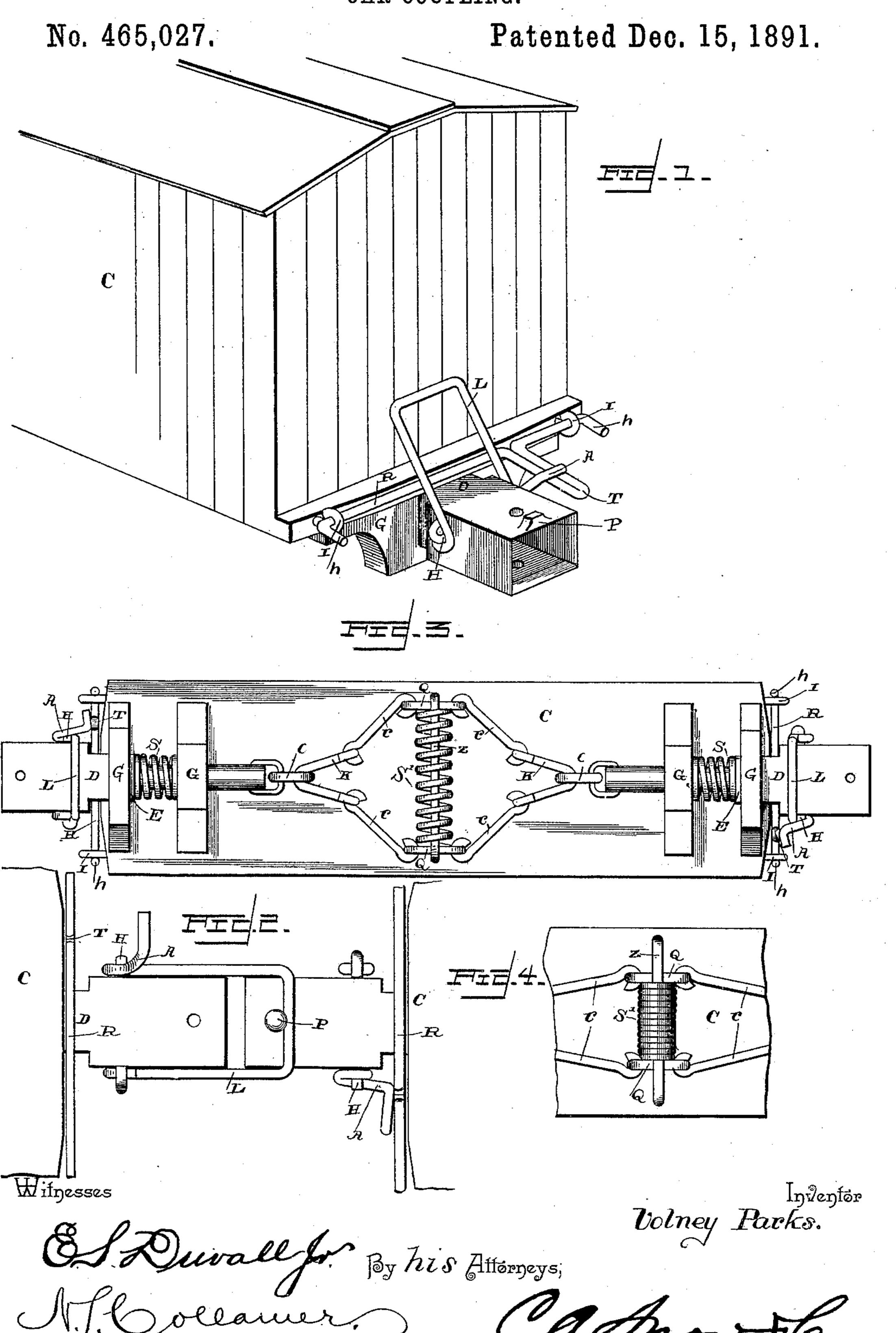
V. PARKS. CAR COUPLING.



United States Patent Office.

VOLNEY PARKS, OF FORT WAYNE, INDIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 465,027, dated December 15, 1891.

Application filed March 14, 1891. Serial No. 385,091. (No model.)

To all whom it may concern:

Be it known that I, Volney Parks, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented a new and useful CarCoupling, of which the following is a specification.

This invention relates to car-couplings, and more especially to draw-bars and draw-heads; and the object of the same is to effect certain improvements in the same.

To this end the invention consists of the details of construction hereinafter more fully described and claimed, and as illustrated on

15 the sheet of drawings, wherein-

Figure 1 is a general perspective view of a car with my improved car-coupling attached, showing the link raised ready to be coupled to an approaching car. Fig. 2 is a plan view of the draw-head, showing the link as lowered and coupled over another draw-head. Fig. 3 is a bottom plan view of the car, showing the manner in which the two draw-bars are connected. Fig. 4 is a similar plan of the central spring in its compressed position.

Referring to the said drawings, the letter C designates the car, and D the draw-bar and draw-head, which are integral in the present case. Upon the upper side of the draw-head is a pin or projection P, over which the link L of another draw-head is adapted to be engaged to couple the cars, in a manner best seen in Fig. 2. The said link L is in the form of a clevis pivoted at its inner ends on a horizontal rod H, which passes through the draw-head in rear of the vertical pin-opening, with which said draw-head is provided for use with

links of the ordinary character.

One end of the link L is provided with a downwardly-extending arm A, and this is adapted to be engaged by a tongue T, depending from a rod R, journaled in eyes I in the end of the car, and having handles h at its ends, whereby it can be operated from the sides of the car. By throwing these handles h upwardly the tongue T is raised, and this strikes the arm A and throws the link L back to the position seen in Fig. 1. If another car be then brought forcibly against the one shown, the draw-heads will be driven to the rear and the link L will fall, engaging the pin or projection P on the approaching draw-head, as

will be understood. To uncouple the cars the handles h, or one of them, is raised, and this lifts the link off of the projection. The 55 link normally hangs beneath the draw-head, and an ordinary link can then be coupled into the draw-head D in the usual manner.

In Fig. 3 is shown the manner in which the two draw-heads of a single car are connected 60 and cushioned beneath the car-body. G are the usual guides, through which the drawbars move, the latter having shoulders or enlargements E, between which and the rear guides are located springs S, which cushion 65 the draw-bars against shocks received by the draw-heads in coupling. The reduced portions of the draw-bars extend through the rear guides and are connected by loops O with clevises K. The inner ends of the latter are 70 linked to rods r, and the inner ends of these rods are connected by short links Q, which stand against the ends of a helical spring S', and these links are in turn connected by a long loop Z, which embraces both the links 75 and extends through the center of the spring. When tension is applied to move the train the forward draw-bar moves through its guides; but the rear draw-bar compresses its spring S. The result of this slight separation of the two 80 draw-bars is to separate the loops O and the clevises K and to draw the rods r inwardly, and this results in causing the short links to approach each other, sliding within the long loop Z and compressing the helical spring S'. 85 By this means a soft and yielding connection is formed between the draw-bars and the carbody, and yet the former are permitted to move inwardly, as is necessary in the act of coupling.

Considerable change may be made in the 90 details of construction without departing from the spirit of my invention.

What is claimed as new is—

1. In a car-coupling, the combination, with a draw-head having a pin rising from its upper side near its front end, a horizontal rod through said draw-head in rear of said pin, and a clevis-shaped link journaled on said rod at the sides of the draw-head and having a downwardly-extending arm, of a rod journaled noo in eyes in the end of the car and having handles at its ends, and a tongue depending from said rod and adapted to strike said arm, as and for the purpose set forth.

2. The combination, with a car-body, guides beneath the same, draw-bars moving within said guides and having rearwardly facing shoulders between them, and expansive coiled springs upon said bars between the shoulders and said rear guides, of loops connected to the inner ends of the draw-bars, clevises connected to said loops, rods leading inwardly from said clevises and diverging from each other, two short links connecting the inner ends of said rods in pairs, a single expansive

helical spring between said short links and independent of the car-body, and a long loop embracing said links and passing through said spring, as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

presence of two witnesses.

VOLNEY PARKS.

Witnesses:

C. M. ROUZER, F. J. DRAKE.