

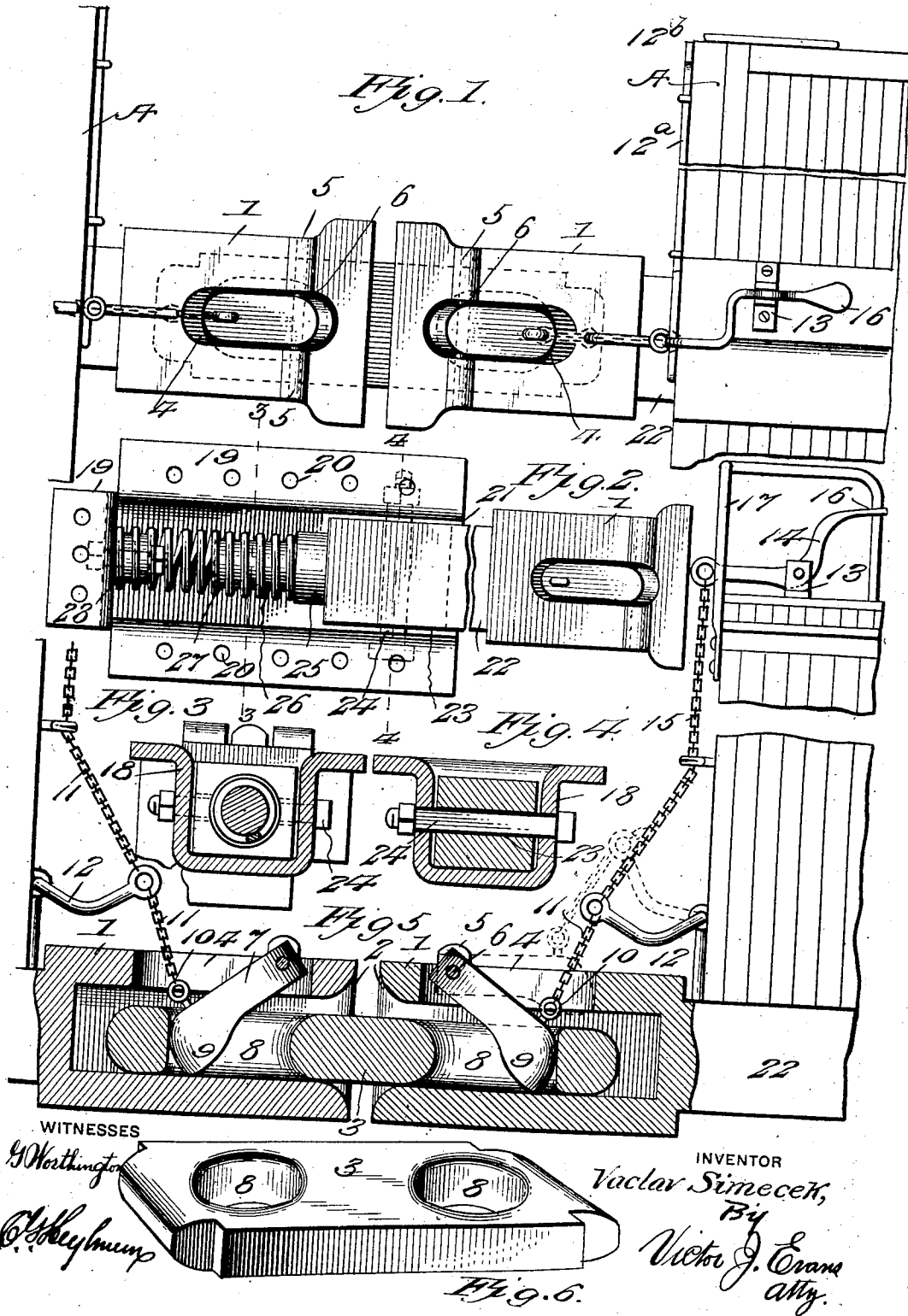
No. 754,352.

PATENTED MAR. 8, 1904.

V. SIMECEK.  
CAR COUPLING.

APPLICATION FILED AUG. 12, 1903.

NO MODEL.



# UNITED STATES PATENT OFFICE.

VACLAV SIMECEK, OF PRAHA, TEXAS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 754,352, dated March 8, 1904.

Application filed August 12, 1903. Serial No. 169,278. (No model.)

*To all whom it may concern:*

Be it known that I, VACLAV SIMECEK, a citizen of the United States, residing at Praha, in the county of Fayette and State of Texas, have invented new and useful Improvements in Car-Couplings, of which the following is a specification.

My invention has relation to new and useful improvements in car-couplings, and more especially to those embodying suitable draw-heads carrying pivoted detents adapted to engage a coupling link or bar for the purpose of connecting the cars.

The primary object of the invention is to provide a coupling of the character mentioned which is simple in construction, efficient in operation, and which will include a means for separating the draw-heads without the necessity of the operator going between the respective cars.

A further object is to provide an improved means for mounting the draw-bar upon the bottom of the car, which means shall have associated therewith a cushioning device for the draw-heads.

I have fully and clearly illustrated my invention in the accompanying drawings; forming part of this specification, and wherein—

Figure 1 is a top plan view of the coupling in closed position. Fig. 2 is a top plan view of the means for mounting the draw-bars upon the bottom of the car and the cushioning device associated therewith. Fig. 3 is a transverse section taken on the line 3 3, Fig. 2. Fig. 4 is a transverse section taken on the line 4 4, Fig. 3. Fig. 5 is a longitudinal central section through the coupling. Fig. 6 is a detail perspective of the coupling link or bar.

Similar characters of reference are employed to indicate corresponding parts in the several views.

A A designate the meeting ends of cars upon which my improved coupling is operatively arranged. This coupling comprises draw-heads 1 1, which are substantial duplicates in structure, each consisting of a head formed with the usual opening 2, adapted to receive one end of the coupling link or bar 3. In their top walls each of the draw-heads is provided with a longitudinally-extending slot 4,

which opens downwardly into the chamber 2, wherein the link is situated.

Upon the top face of the head and adjacent the front end of the slot 4 are formed vertically-projecting lugs 5, formed with alining apertures wherein is situated a cross-pin 6. Upon this pin 6 is pivotally supported at one end a detent 7, the free end of which is adapted to engage within an opening 8 in the end of the coupling-link for the purpose of completing the coupling. Upon their lower or front faces these detents are provided with cam-faces 9, against which the end of the coupling-link engages when passing into the chamber 2 and which adds sufficient weight to the end of the detent to hold it normally seated against the bottom of the chamber 2. Upon the top face of this detent is provided an eye 10, to which is connected one end of a chain 11, the free end of which is connected to one end of an arm 12, projecting from a bar 12<sup>a</sup>, rotatably mounted upon the end of the car and projecting beyond the side thereof, where it is formed with an operating-handle or crank 12<sup>b</sup>, by which said bar may be rotated for the purpose of lifting the detent.

Upon the roof of the car and adjacent the end thereof is a vertical bracket 13, upon which is pivotally mounted an operating-lever 14, one end of which is connected to the bar 12, before mentioned, by means of a connecting-chain 15, and the other end of said lever 14 is provided with a flattened portion 16, adapted to be engaged by the foot of the brakeman for the purpose of lifting the detent 7 out of engagement with the coupling link or bar.

17 designates a guard-rail secured to the end and side edges of the car and adjacent the foot-lever 14 for the purpose of protecting said lever and preventing its accidental depression to release the coupling while the cars are in motion.

The improved means for mounting the draw-head and the draw-bar upon the bottom of the car will now be described. 18 designates a strong metallic casing formed upon its longitudinal edges and at one end with marginal laterally-projecting flanges 19, provided with suitable apertures 20, through which suitable fastening means may be projected for the

purpose of securing said casing in position upon the bottom of the car. This casing at the end adjacent the end of the car to which it is attached is left open, as at 21, and projecting within the casing through said open end 21 is the draw-bar 22, which carries the draw-head 1, previously described. This draw-bar is provided with a transverse slot 23, through which is projected a cross-bolt 24, which is rigidly mounted in the side or longitudinal wall of the casing. At its rear portion the draw-head 22 is provided with a centrally-arranged abutment 25, from which projects a rearwardly-extending stud 26, upon which is arranged an expansive coil-spring 27, one end of which is arranged in engagement with the abutment 25 and the other end of which engages around a projection 28, arranged at approximately the center of the rear wall of the casing, against which the end of said spring abuts. The force exerted by the spring 27 serves to project the draw-bar from the casing; the outward movement of said draw-bar being limited by its engagement with the bolt 24, which extends through the slot 21. Said spring also serves as a cushioning means for the coupling-head during the operation of connecting the same.

As above stated, when in their normal position the detents 7 rest with their lower ends upon the bottom of the chamber in the draw-head, and when in this position they are adapted to be engaged by the end of the coupling-link for the purpose of completing the coupling. When it is desired to make the coupling, the draw-head carrying the coupling-link is brought into proximity with the opposite draw-head, the coupling-link being projected into the chamber therein. In passing into the said chamber the end of the coupling-link engages the detent, which will be lifted up over the end of the link and will drop within the recess 8, when the coupling will be completed. When it is desired to uncouple the cars, it is not necessary that the operator

pass between the ends thereof; but by simply depressing the foot-lever 16 the detent will be lifted out of engagement with the link, which will be released from the draw-head.

Having thus fully described my invention, what I claim as new is—

1. In a car-coupling, the combination with a car-body; of a casing secured thereto, a draw-bar slidably mounted within the casing and having a slot therein, said draw-bar carrying a head having a longitudinal slot in its upper wall, lugs on the head, a pin in the lugs, a detent pivoted on the pin and provided with a cam-face upon its front portion, an eye upon the detent, a foot-lever fulcrumed upon the car-body, a chain connecting the eye of the detent and said lever, a bolt rigidly mounted in said casing and extending through the slot in the draw-bar and an expansive spring engaging one end of the casing and the rear of the draw-bar.

2. In a car-coupling, the combination with a car-body, of a casing having marginal flanges secured to the body, and a projection in one end thereof, a draw-bar slidably mounted within the casing and having a slot therein, said draw-bar carrying a head having a longitudinal slot in its upper wall, lugs on the head, a pin in the lugs, a detent pivoted on the pin and provided with a cam-face upon its front portion, an eye upon the detent, a foot-lever fulcrumed upon the car-body, a chain connecting the eye of the detent and said lever, a bolt rigidly mounted in the casing and projected through said slot, and an expansive spring within the casing, one end of said spring engaging the projection in the casing and the other end abutting the draw-bar.

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

VACLAV SIMECEK.

Witnesses:

ANTON KOUDELKA,  
TOM PRAJER.