(No Model.)

W. L. SCHLAGER & J. C. DOMMERMUTH.

CAR COUPLING.

No. 453,670. Patented June 9, 1891.

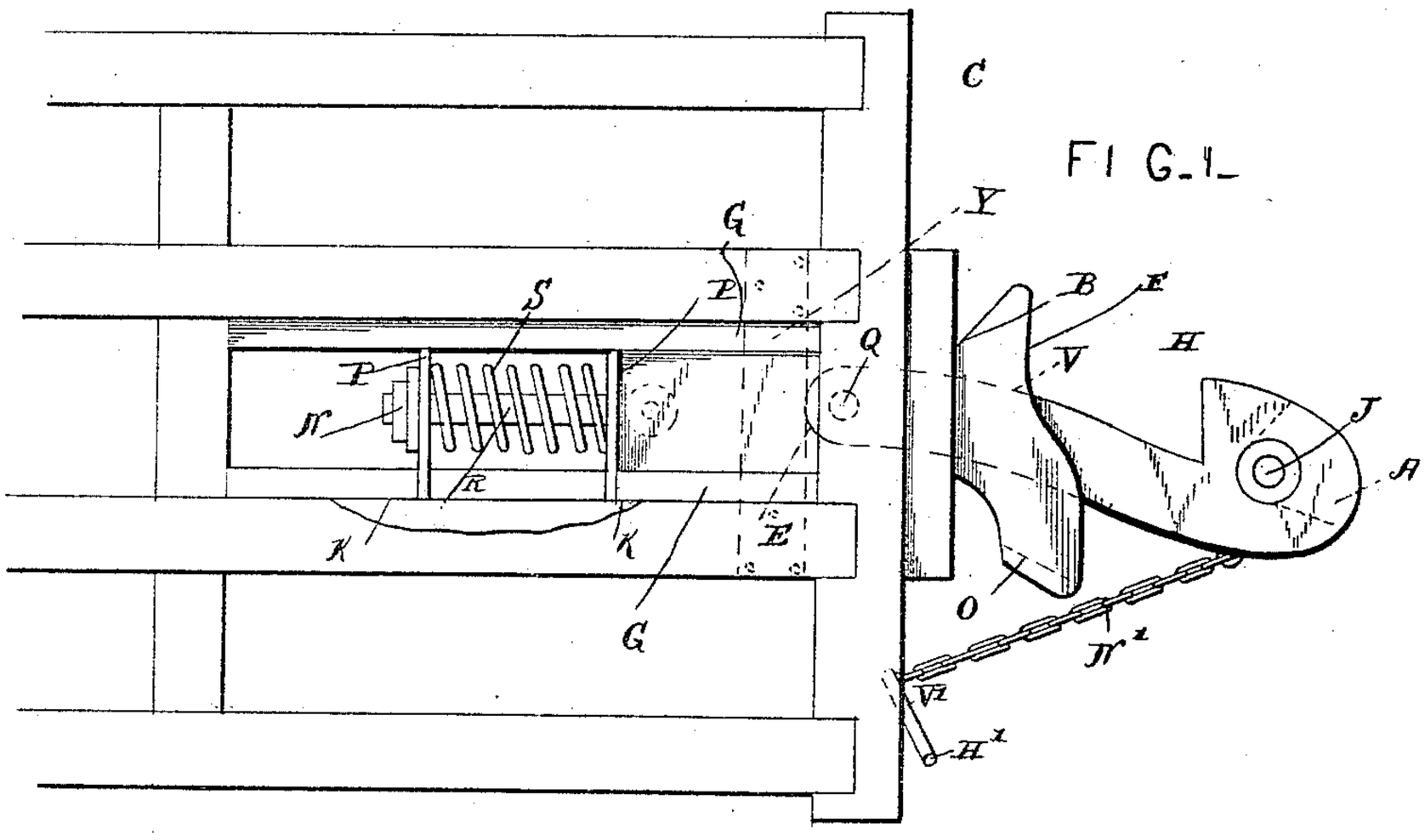


FIG. 1.

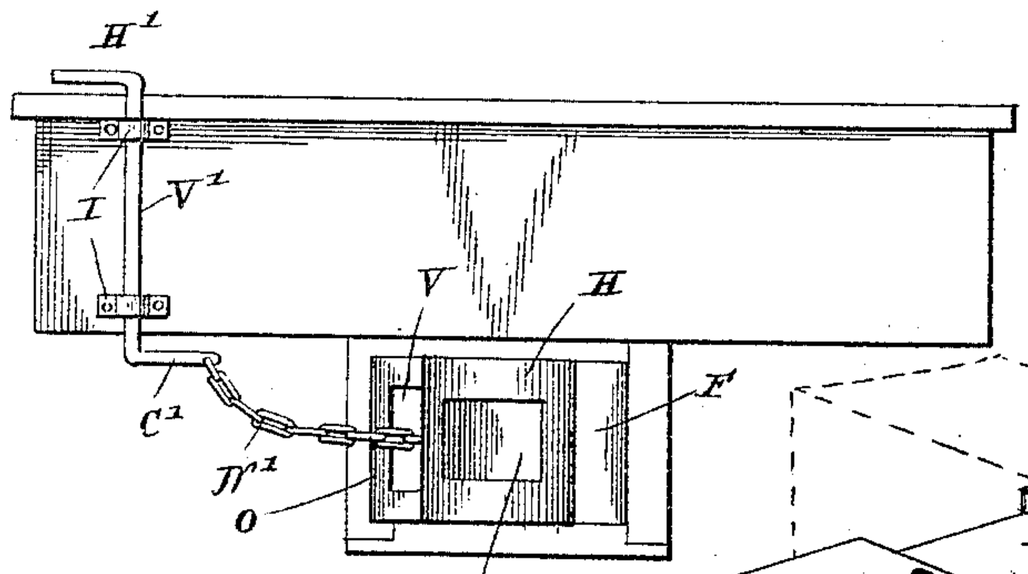


FIG. 2.

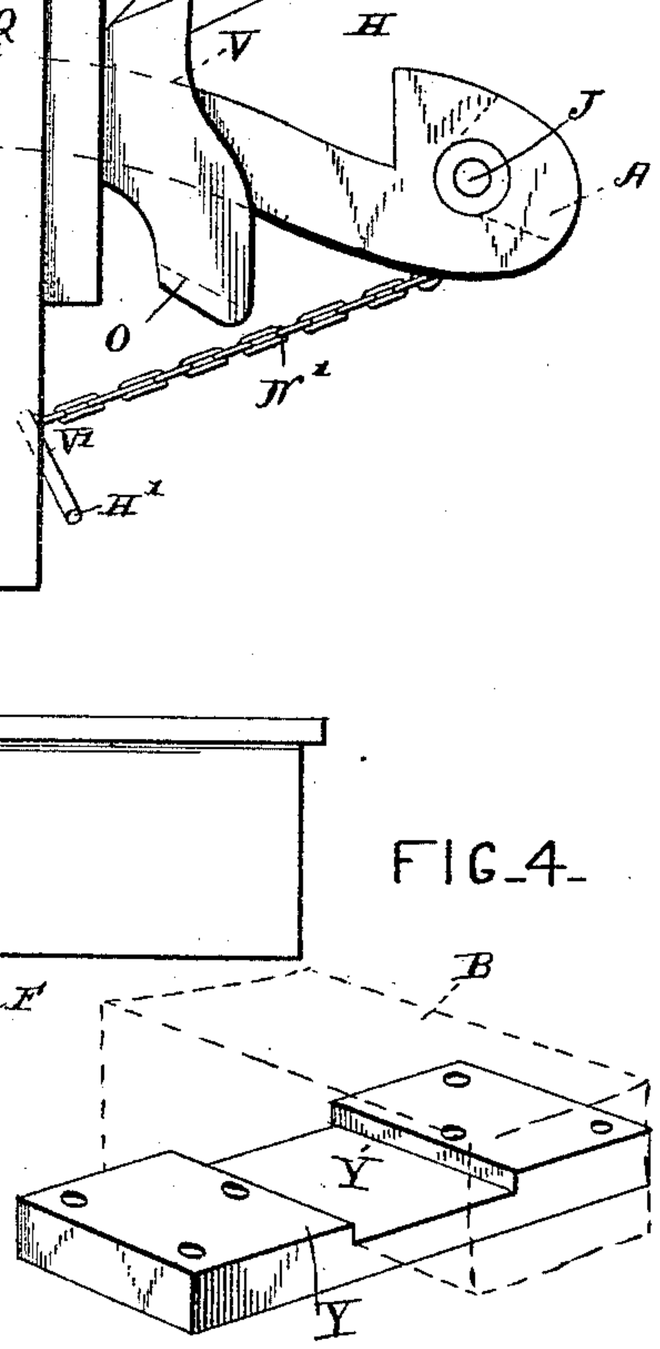
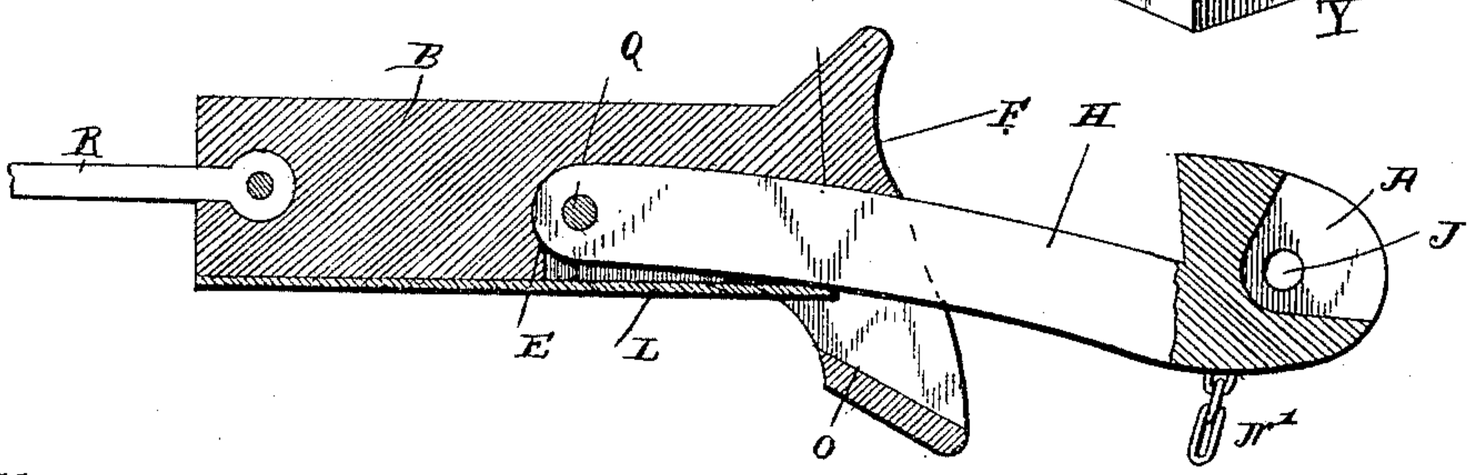


FIG. 4.

FIG. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

WALTER LINCOLN SCHLAGER AND JOHN C. DOMMERMUTH, OF AVOCA, PENNSYLVANIA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 453,670, dated June 9, 1891.

Application filed March 14, 1891. Serial No. 385,087. (No model.)

To all whom it may concern:

Be it known that we, WALTER LINCOLN SCHLAGER and JOHN C. DOMMERMUTH, citizens of the United States, residing at Avoca, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Car-Coupling, of which the following is a specification.

This invention relates to car-couplings, and more especially to that class known as "draw-bars," and the object of the same is to produce certain improvements therein.

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

Figure 1 is a plan view of this device with the car-body removed. Fig. 2 is an end elevation showing the uncoupling device. Fig. 3 is a horizontal section through the draw-bar and draw-head. Fig. 4 is a perspective detail of the yoke-strap.

Referring to the said drawings, the letter C designates a car, beneath which are arranged the guides G for the draw-bar B. Between these guides are located plates P, whose movements are limited by shoulders or blocks K, and through these plates extends a rod R, having a nut N at its rear end standing against the back face of the rearmost plate and connected at its front end with the rear end of the draw-bar B, which stands against the front face of the front plate. Upon this rod R between the plates is located a strong coiled spring S. This spring cushions the blows received in coupling, when the draw-bar B will be driven to the rear, and it also cushions the drawing-tension, all in a manner which will be clearly understood. The draw-bar is supported by a yoke-strap Y. (Best seen in Fig. 4, but shown in dotted lines in Fig. 1.) This has a recess Y′, which embraces the draw-bar and prevents its lateral play.

The draw-bar B has a cavity V in its body with a rounded rear end E, and the front end of this cavity opens through a portion of the face of the draw-bar, the outer side O of the opening standing behind the draw-head and the remaining portion F of the face being slightly dished, as shown, for a purpose to appear hereinafter.

The draw-head H is hook-shaped, the shank thereof extending into the cavity of the draw-bar and being mounted on a vertical pin Q therein, so that its rear end shall rest against the rounded end E of the cavity and the pins will not entirely sustain the shocks of coupling. The head of the hook-shaped draw-head is cut away, as at A, and a vertical pin-opening J intersects the same, whereby an ordinary link may be coupled in this draw-head, as will be readily understood. The body of the draw-head moves within the opening in the front end of the draw-bar and at one side of the face F, and a leaf-spring L is connected to the draw-bar and bears at its free end upon the outer side of the draw-head, preferably at a point within the outer side O of said cavity, the normal tension of this spring pressing the hook-shaped draw-head inwardly, as will be seen. If desired, several leaf-springs may be used without departing from the spirit of our invention.

V′ is a vertical rod journaled in eyes I in the end of the car and having a handle H′ at its upper end and a crank C′ at its lower end, and N′ designates a chain connecting this crank with the outer side of the hooked front end of the draw-head. When the crank is operated by the turning of the handle from the top or platform of the car, this chain will be drawn upon to move the draw-head H against the tension of the leaf-spring L, and hence to uncouple the cars; but the outer side O of the opening in the front end of the draw-bar will limit the movement of the draw-head to only so much as is necessary in the operation of uncoupling.

When the cars are to be uncoupled, they are brought together, and the beveled or rounded faces of the two draw-heads H will slide over each other, causing the leaf-springs L to bend outwardly slightly. The front ends of the draw-heads will strike the faces F of the draw-bars, and the latter will be driven to the rear against the tension of the coiled springs S, the draw-heads meanwhile springing into engagement with each other. The uncoupling can be done in the manner stated above.

What is claimed as new is—

The herein-described car-coupling, the same

comprising a draw-bar B, having a cavity V, opening from its front end and provided with a rounded rear end E, the outer side O of the front end of said cavity being closed and the opposite side F of the end of the draw-bar being solid, a draw-head H, having a hooked front end, its shank extending into said cavity and having a rounded rear end resting against said end E of the cavity, a vertical pivot-pin Q through said shank concentric with said rounded end, a leaf-spring secured to the draw-bar with its front end standing within the open mouth of said cavity and pressing against the back of said draw-head, means for supporting said draw-bar beneath a car, and means for retracting said draw-head against the tension of the spring, all substantially as and for the purpose hereinbefore set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

WALTER LINCOLN SCHLAGER.
JOHN C. DOMMERMUTH.

Witnesses:
PETER J. GILLESPIE,
JOHN SCOTT CAMPBELL.