

(No Model.)

C. W. PATTON.
CAR COUPLING.

No. 502,499.

Patented Aug. 1, 1893.

Fig. 1.

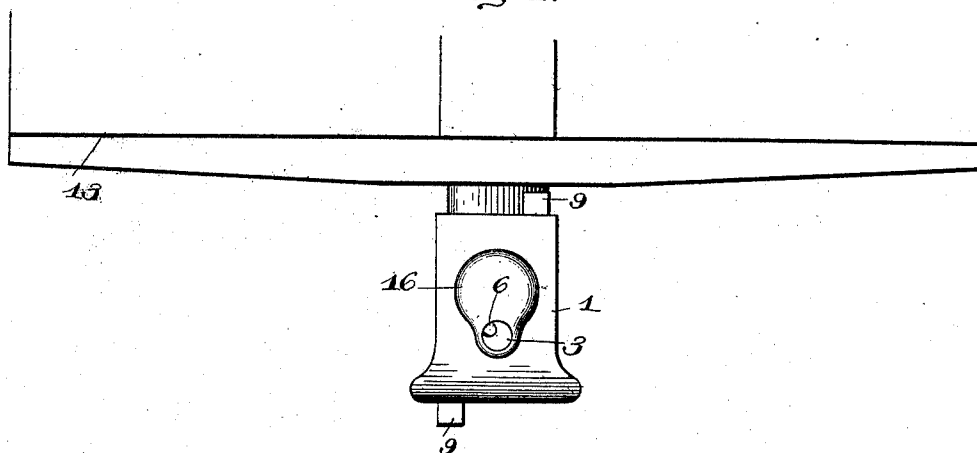


Fig. 2.

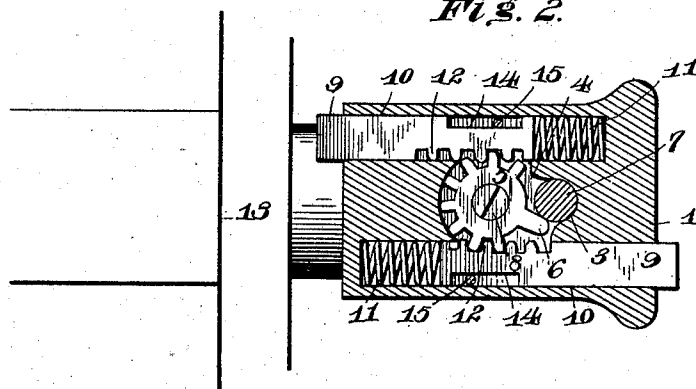
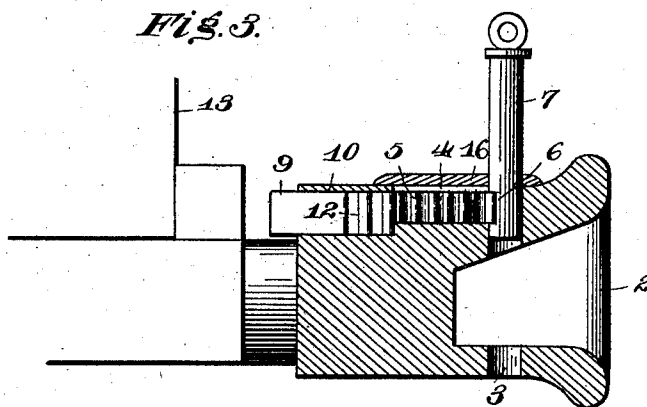


Fig. 3.



Witnesses

C. A. Ford
N. B. Riley

Inventor

Charles W. Patton.

By His Attorneys,

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

CHARLES W. PATTON, OF OHIO FALLS, INDIANA, ASSIGNOR OF TWO-THIRDS
TO JOHN J. RAMSEY AND THOMAS J. RAMSEY, OF SHELBYVILLE, KEN-
TUCKY.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 502,499, dated August 1, 1893.

Application filed March 23, 1893. Serial No. 467,312. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. PATTON, a citizen of the United States, residing at Ohio Falls, in the county of Clark and State of Indiana, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car couplings.

The object of the present invention is to improve the construction of car couplings, and to provide simple and effective means for holding a coupling pin elevated preparatory to coupling, and for causing said pin to fall and engage a link when the latter has entered the draw-head having the elevated pin.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a plan view of a car coupling constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same, the pinion, rack bar and springs being shown in plan view. Fig. 3 is a vertical longitudinal sectional view, the pin being shown elevated.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a draw-head having a link opening or cavity 2 and a coupling pin perforation 3; the draw-head is provided in its upper face with a circular recess 4, in which is a spring actuated pinion 5 having a lug 6 to engage frictionally a coupling pin 7 to hold the latter elevated. The pinion 5 is journaled on a screw 8 and meshes with rack-bars 9, which are arranged in longitudinal ways 10 of the draw-head, and which have their inner ends engaged by spiral springs 11. The inner portions of the rack-bar are provided at their inner sides with teeth 12; and their outer ends project beyond the front and back of the draw-head to be engaged by the draw-head of an approaching car to rotate partially the pinion to carry the lug 6 out of engagement with the coupling pin to cause the latter to fall; and in event of the

draw-head of the approaching car being forced aside or downward, the rearwardly extending rack-bar would come in contact with the dead wood or other timbers of the car 13 and partially rotate the pinion. By having one of the rack-bars projecting forward and the other rearward the operation is rendered positive and reliable. The outer side of the inner portion of each rack-bar is recessed at 14, and the pin 15 retains the rack-bar in the way by limiting its outward movement; and the recess permits the rack-bar to have sufficient longitudinal movement.

The circular recess of the draw-head is covered by a cap 16.

It will be seen that the means for holding the coupling pin elevated are simple and comparatively inexpensive in construction, that they are positive and reliable in operation, that they render the coupling automatic and that they do not necessitate a train hand going between cars during coupling.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the details of the construction.

What I claim is—

1. In a car coupling, the combination of a draw-head, a pinion provided with a lug for engaging a coupling pin, and a rack-bar mounted on the draw-head and meshing with the pinion and projecting from the draw-head to be forced inward in coupling, substantially as and for the purpose described.

2. In a car coupling, the combination of a draw-head, a pinion provided with a lug for engaging a coupling pin, a rack-bar mounted on the draw-head and meshing with the pinion and projecting from the draw-head to be forced inward in coupling, and a spring for holding the lug in engagement with the coupling pin, substantially as described.

3. In a car coupling, the combination of a draw-head, a pinion provided with a lug to engage a coupling pin to hold the latter elevated, the oppositely arranged rack-bars meshing with the pinion and projecting beyond the draw-head at the front and back of the same, and a spring for holding the lug in

engagement with a coupling pin, substantially as described.

4. In a car coupling, the combination of a draw-head provided with ways and having a recess, a pinion mounted in the recess and provided with a lug to engage a coupling pin, oppositely disposed rack-bars meshing with the pinion and projecting from the front and back of the draw-head and provided with recesses, pins arranged in the recesses, and

spiral springs arranged at the inner ends of the rack-bars, substantially as described.

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

CHARLES W. PATTON.

Witnesses:

A. J. STEPHENS,

B. F. BENNETT.