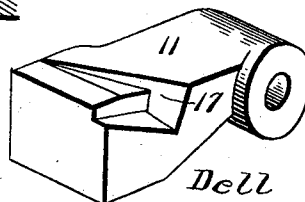
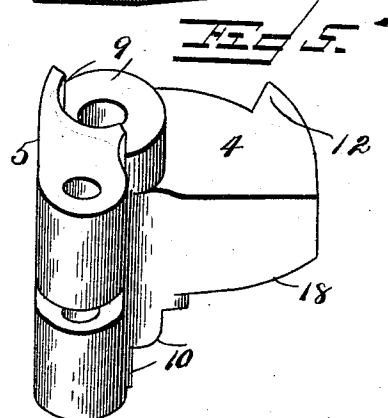
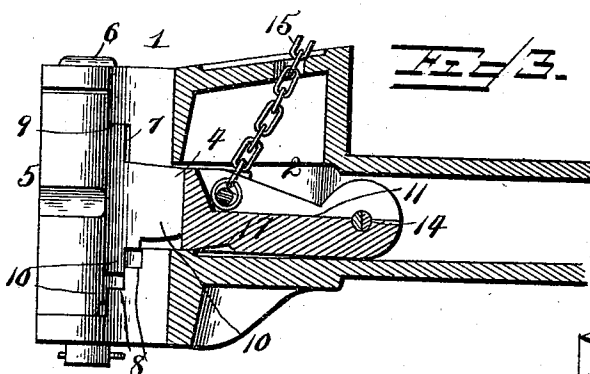
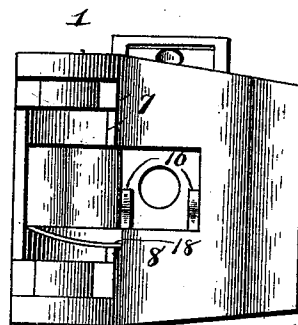
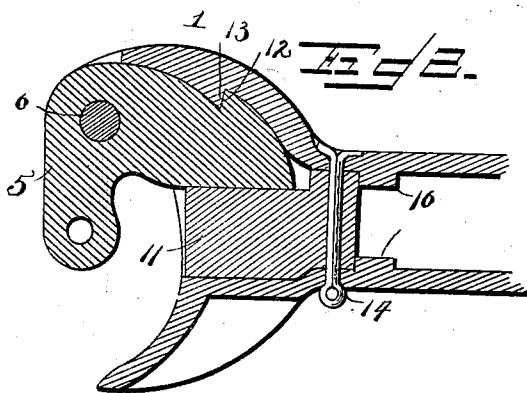
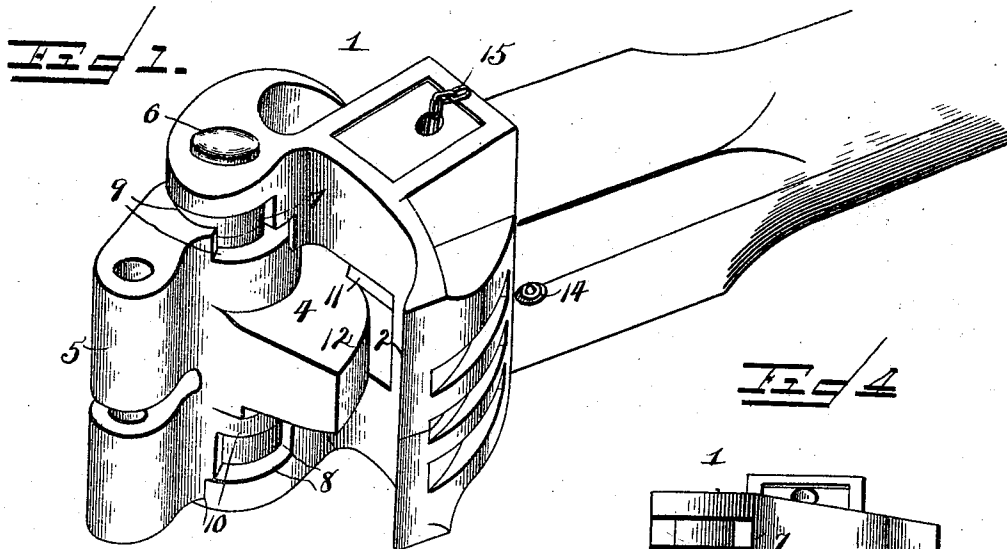


(No Model.)

D. W. & G. JEWELL.
CAR COUPLING.

No. 506,235.

Patented Oct. 10, 1893.



Witnesses

W. C. Schneider
H. H. Riley

By their Attorneys,

C. A. Snow & Co.

Inventors
Dell W. Jewell
George Jewell.

UNITED STATES PATENT OFFICE.

DELL. W. JEWELL AND GEORGE JEWELL, OF BATAVIA, NEW YORK, ASSIGNORS
OF TWO-THIRDS TO JEROME C. GUTEAU, OF SAME PLACE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 506,235, dated October 10, 1893.

Application filed March 15, 1893. Serial No. 466,114. (No model.)

To all whom it may concern:

Be it known that we, DELL. W. JEWELL and GEORGE JEWELL, citizens of the United States, residing at Batavia, in the county of Genesee and State of New York, 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 twin-jaw car couplings, to provide an automatic one, and to increase the strength of the same by relieving the knuckle pin of strain.

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 perspective view of a car coupling constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same, showing the position of the cars when coupled. Fig. 3 is a vertical longitudinal sectional view showing the position of the cars when uncoupled. Fig. 4 is a detail view of the draw-head, the knuckle being removed. Fig. 5 is a similar view of the knuckle. Fig. 6 is a detail perspective view of the catch.

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

1 designates a draw-head composed of upper and lower portions and having a horizontal opening 2 to receive an arm 4 of a knuckle 5, which is pivoted by a knuckle-pin 6 to the draw-head. The knuckle-pin 6 is arranged in top and bottom eyes of the draw-head and an eye of the knuckle; the draw-head is annularly rabbeted or recessed to form a series of step-like shoulders 7 and 8, and the knuckle is similarly recessed to form corresponding shoulders 9 and 10. The arm 4 when arranged within the draw-head is engaged by a pivoted catch 11 to lock the knuckle in engagement with a similar knuckle of a twin-draw-head; and in order to relieve the knuckle pin of the strain when cars are coupled, the arm is provided adjacent to its rear end with a lateral shoulder 12, which engages a corresponding

shoulder 13 of the draw-head. The catch is pivoted at the back by a horizontal pin 14; and the draw-head is provided in its top with a recess to receive the catch, when drawn upward by a chain 15 to release the knuckle for uncoupling. The horizontal pin is split, and has its head arranged in a countersunk portion of the draw-head, and its other end is spread to prevent the withdrawal of the pin by accident and is arranged in a depression or countersunk portion. The draw-head is provided with bearing shoulders 16 arranged back of the catch at opposite sides thereof to prevent the same being forced rearward and crippling the pin 14, in event of coupling with a pin and link and the latter striking the catch when the cars come together for coupling.

The catch is provided at the bottom of its inner side at the front thereof with a recess 17 to form a shoulder to engage the arm of the knuckle to permit coupling on a curve, where it is impossible for the arm to completely enter the draw-head. After the shoulder has engaged the arms sufficiently for coupling, it will remain in such engagement until the arm or the knuckle moves farther within the draw-head by the cars reaching a straight track, and the catch will then drop in front of the arm making the coupling complete.

The knuckle automatically opens for automatic coupling when the catch is raised by means of an inclined shoulder 18, formed by recessing the draw-head in rear of the knuckle joint and adapted to be engaged by a shoulder 19 arranged on the lower face of the arm of the knuckle. By this construction the knuckle is raised when closed, and falls in opening, and thereby opens as soon as released.

It will be seen that the car coupling is simple and inexpensive in construction, that it is automatic in operation, that the knuckle will open automatically for coupling as soon as released, and that the knuckle-pin is relieved of strain.

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 advantages of this invention.

What we claim is—

1. In a car coupling, the combination of a draw-head provided at one side at the top and bottom with knuckle eyes, annularly recessed
5 on their lower and upper faces respectively and forming step-like shoulders, said draw-head being provided in rear of the lower eye with a curved inclined shoulder conforming to the knuckle joint, a knuckle pivoted to the
10 draw-head and provided with annular recesses forming shoulders corresponding with those of the draw-head and having an arm and provided with a curved inclined shoulder to engage that of the draw-head, and a
15 catch for engaging the knuckle provided at its lower edge with the recess 17, substantially as and for the purpose described.

2. In a car coupling, the combination of a draw-head, a knuckle pivoted thereto, a catch arranged within the draw-head, a pin passing 20 through the draw-head and pivoting the catch, and curved bearing shoulders located back of the catch at opposite sides thereof, substantially as and for the purpose described.

In testimony that we claim the foregoing as 25 our own we have hereto affixed our signatures in the presence of two witnesses.

DELL. W. JEWELL.
GEORGE JEWELL.

Witnesses:

W. C. UNDERHILL,
GEO. J. GUTEAU.