

No. 614,505

Patented Nov. 22, 1898.

C. M. SIEVER.
CAR COUPLING.

(Application filed June 11, 1898.)

(No Model.)

Fig. 1.

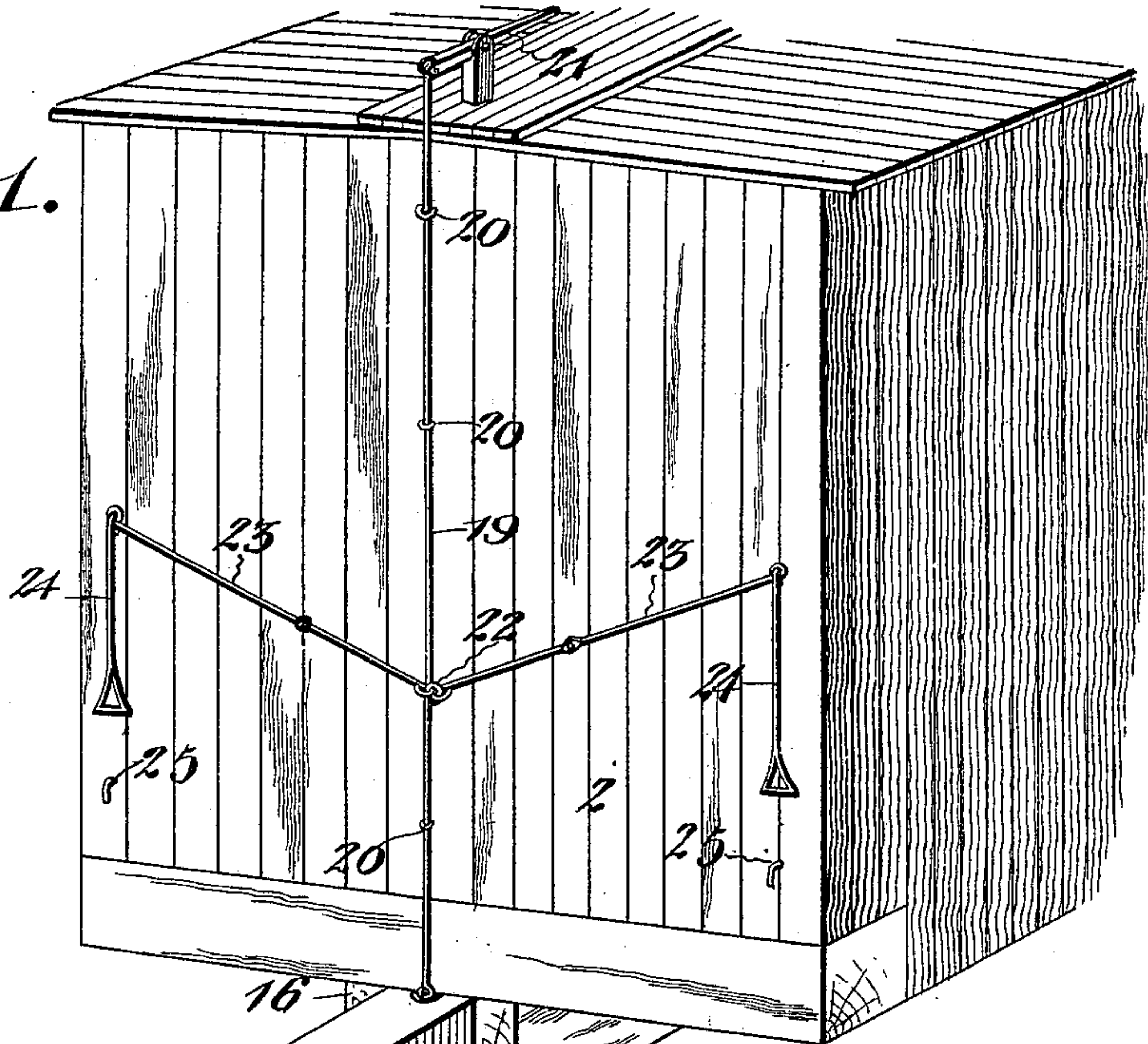


Fig. 2.

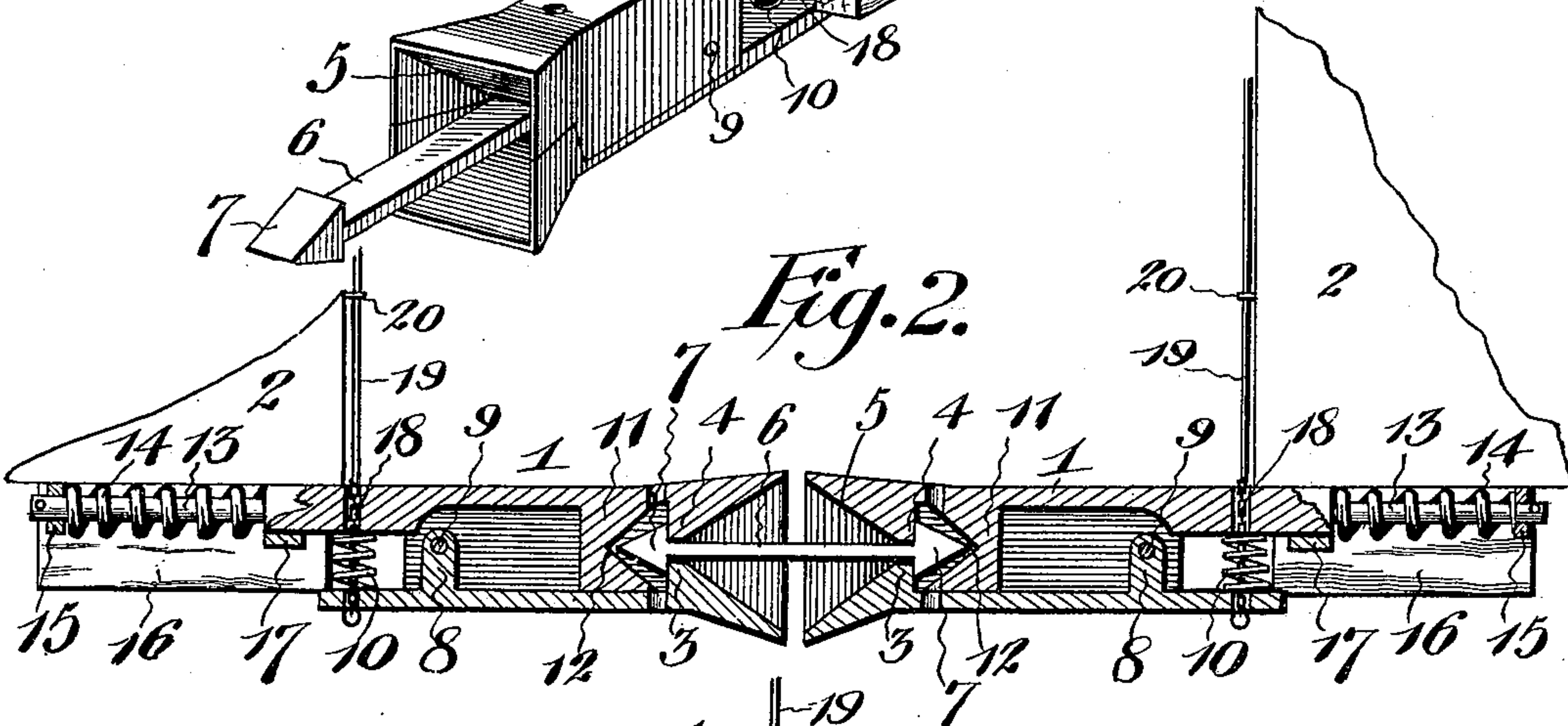
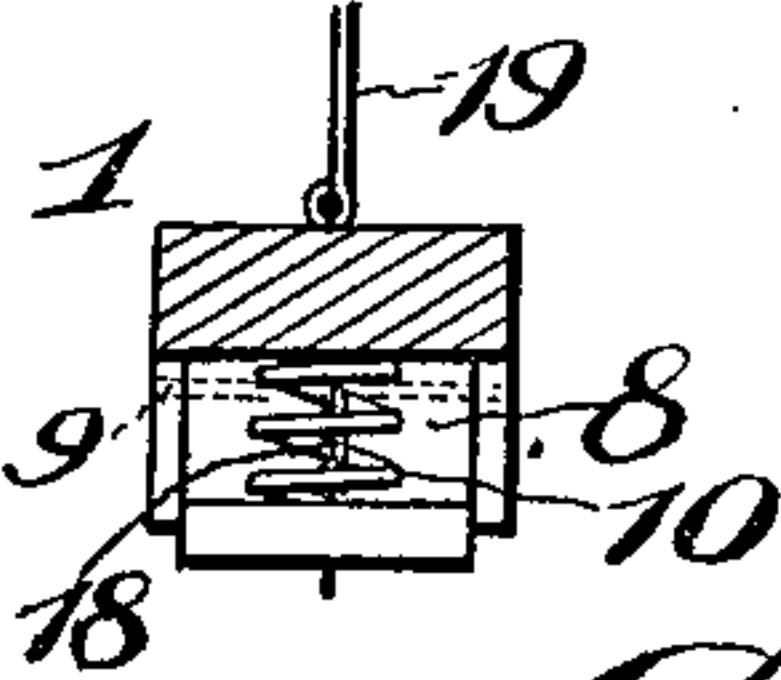


Fig. 3.



Witnesses

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CHARLES M. SIEVER, OF HOLTON, KANSAS.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 614,505, dated November 22, 1898.

Application filed June 11, 1898. Serial No. 683,220. (No model.)

To all whom it may concern:

Be it known that I, CHARLES M. SIEVER, a citizen of the United States, residing at Holton, in the county of Jackson and State of Kansas, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

10 The object of the present invention is to improve the construction of car-couplings and to provide a simple, strong, and inexpensive one capable of coupling automatically and adapted to be readily uncoupled
15 without going between the cars.

A further object of the invention is to provide a car-coupling which may be readily operated from the tops and sides of cars to uncouple it and which will be adapted to couple
20 with the ordinary pin-and-link car-coupling.

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

In the drawings, Figure 1 is a perspective view of a car-coupling constructed in accordance with this invention and shown applied to a car. Fig. 2 is a longitudinal sectional
30 view showing the two draw-heads coupled. Fig. 3 is a transverse sectional view.

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

35 1 designates a draw-head mounted on a car 2, as hereinafter described, and consisting of a closed top portion and depending sides, between which is pivoted a lower vertically-swinging jaw 3, which coöperates with an
40 upper fixed or rigid jaw 4 of the draw-head. The front of the draw-head is inclined at 5 to direct a link 6 into engagement with it, and the jaw 4, which is located at the bottom of the inclined portion 5, has a straight vertical
45 inner face for engaging one of the heads of the link 6.

The link 6, which is provided with arrow-heads 7, engages the jaws 3 and 4, and the jaw 3 has its front face beveled, as shown,
50 and is adapted to be opened by the link. The shank or body portion of the lower jaw 3 is provided between its ends with an upwardly-

extending perforation or ear 8, which is pivoted between the sides of the draw-head by a transverse pin 9, passing through the perforation of the ear 8 and having its ends arranged in suitable perforations of the sides of the draw-head.

The rear portion of the shank of the lower jaw is engaged by a vertical coil-spring 10, 60 interposed between the shank and the top of the draw-head, as clearly shown in Fig. 2 of the accompanying drawings. The spring 10 forces the inner or rear end of the shank downward and maintains the lower jaw normally closed.

The draw-head is provided in rear of the engaging portions of the jaws with a transverse diaphragm or partition 11, depending from the top of the draw-head and connected
70 with the sides, and provided in its front or outer face with a V-shaped recess 12, consisting of upper and lower oppositely-inclined walls and conforming to the configuration of the arrow-headed link. The transverse partition prevents the link from slipping backward or inward into the draw-head when making a coupling, and it also holds the pin in position and prevents it from dropping too low, and the lower inclined wall of the recess
80 operates to direct the link out of the draw-head when the jaws are opened and prevents the link from becoming hooked on the lower jaw.

The draw-head is provided with a shank or 85 draw-bar 13, which is reduced, and a cushioning-spring 14 is disposed on the reduced portion of the draw-bar and is interposed between a transverse plate 15 and the shoulder formed by the reduction of the draw-bar. 90 The rear end of the shank or draw-bar passes through an opening in the plate 15 and is provided with a perforation for the reception of a key, which is arranged at the inner or rear face of the plate. The draw-head is mounted
95 between the draft-timbers in the usual manner by transverse bars or carrier-irons 17, suitably secured to the draft-timbers 16.

The coupling-pin may be made straight, as illustrated in the accompanying drawings, or 100 it may be provided with a crooked shank to enable it to couple cars having their draw-heads arranged at different elevations. Also one of the heads of the link may be dispensed

with, and a perforation may be provided to enable the draw-head to couple with an ordinary pin-and-link draw-head, and the draw-head 1 is provided with a coupling-perforation to enable it to receive an ordinary link.

5 The operation of uncoupling may be performed from the top and sides of the car, and the rear portions of the draw-head and the shank of the lower jaw are provided with 10 perforations to receive a chain 18, which extends upward through the coiled spring. The upper end of the chain is connected to the lower end of a vertical rod 19, arranged in suitable guides 20 and extending above the 15 car, its upper end being connected with a lever 21, fulcrumed between its ends on a suitable support. By operating the lever 21 the operation of uncoupling may be readily performed from the top of the car. The rod 19 20 is provided between its ends with an eye 22, to which are connected a pair of levers 23, extending outward from the rod toward the sides of the car and fulcrumed between their ends. The outer ends of the levers 23 are 25 provided with depending handle-rods 24, having suitable grips at their lower ends and adapted to be readily grasped by a person at either side of the car. The car is provided at opposite sides with hooks 25, adapted to 30 be engaged by the grips of the transverse levers to enable the jaws to be held open when desired.

35 The invention has the following advantages: The car-coupling, which is simple and comparatively inexpensive in construction, is strong and durable and adapted to be readily uncoupled from the tops and sides of cars, and it is capable of automatic coupling. The

transverse partition, which is arranged in rear of the jaws, is adapted to support the coupling-link and prevent it from dropping too low, and it is also adapted to guide the link out of the draw-head to prevent it from catching on the lower jaw. The upper rigid or fixed jaw is arranged to receive all the 45 strain incident to drawing a train of cars, and there is no liability of the lower hinged jaw being broken or otherwise injured by such strain.

Changes in the form, proportion, and minor 50 details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What I claim is—

A car-coupling comprising a draw-head provided with an upper rigid jaw adapted to engage an arrow-headed link, a lower hinged jaw arranged to swing vertically and cooperating with the upper rigid jaw, and the rigid transverse partition located in rear of the 60 jaws and depending from the upper one and provided at its front or outer face with a V-shaped recess composed of upper and lower oppositely-inclined walls, said partition being arranged to form a stop for a link, and 65 the lower inclined wall forming a guide for directing a link out of the draw-head when the lower hinged jaw is open, substantially as described.

In testimony that I claim the foregoing as 70 my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES M. SIEVER.

Witnesses:

C. B. FUNDIS,
JAMES ELLISON.