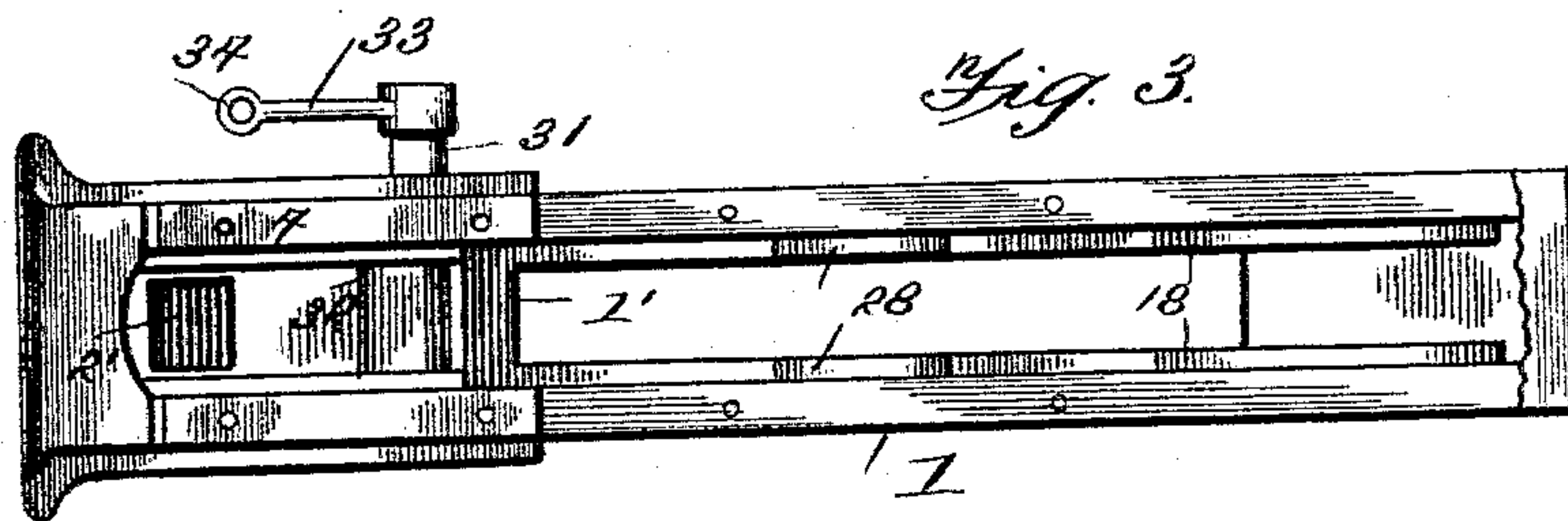
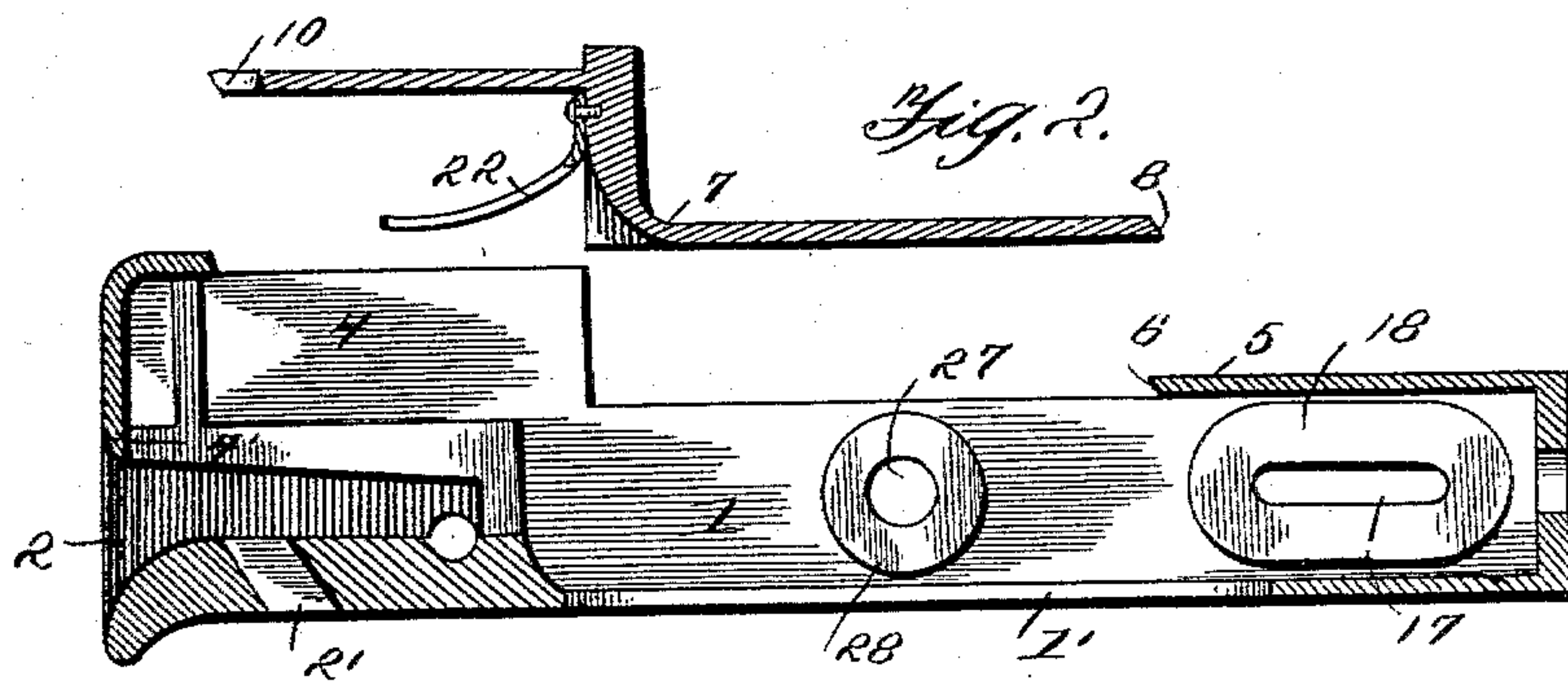
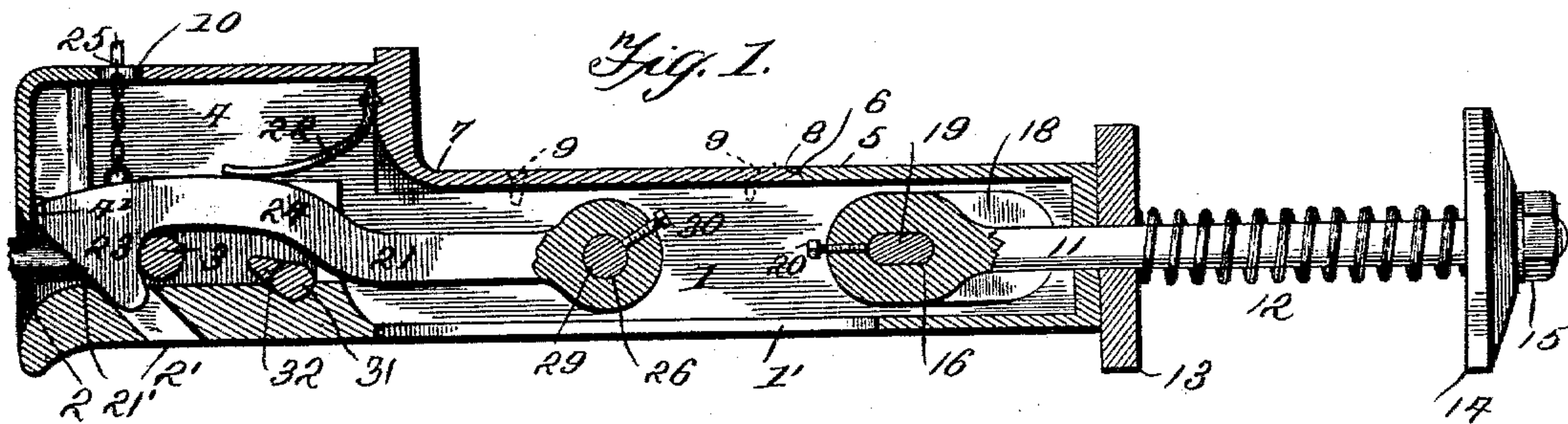


(No Model.)

F. DUPLAISIR.
CAR COUPLING.

No. 596,963.

Patented Jan. 4, 1898.



Witnesses
John D. Moore
J. H. Jochem Jr.

Inventor:
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UNITED STATES PATENT OFFICE.

FRANÇOIS DUPLAISIR, OF NEW ORLEANS, LOUISIANA.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 596,963, dated January 4, 1898.

Application filed November 17, 1896. Renewed November 26, 1897. Serial No. 659,900. (No model.)

To all whom it may concern:

Be it known that I, FRANÇOIS DUPLAISIR, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Car-Couplers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railways, and more especially to the cars used thereon; and the object of the same is to produce an improved car-coupling for use at the extremities of the cars.

To this end the invention consists in the specific details of construction hereinafter more fully described and claimed, and as illustrated in the accompanying drawings, in which—

Figure 1 is a central longitudinal section with all the parts in position. Fig. 2 is a similar section with the detachable parts removed and the cover slightly raised from the draw-head. Fig. 3 is a plan view similar to Fig. 2 and also showing the rear portion of the top of the draw-head as partly broken away.

Referring to the said drawings, the numeral 1 designates the body of the draw-head, having the usual mouth 2 at its front end for the reception of the ordinary link 3, and upon its upper side just in rear of such mouth is a box or enlargement 4, whose interior communicates with the interior of the draw-head, the latter being box-shaped, as will be understood. The rear portion 5 of the top of this box-shaped draw-head is fast thereon and its front end is undercut or beveled, as at 6, while 7 designates a removable cover for the front portion of the draw-head, the upright part in rear of the box 4, and the top of the latter, the rear end 8 of this cover being beveled or shaped, so as to engage the undercut part 6, while screws or bolts 9 pass through other parts of its body for holding it removably in place, and 10 is an opening left through this cover for a purpose to appear below.

11 designates the draw-bar, around which is coiled the usual buffer-spring 12 between a washer 13, standing against the rear end of the draw-head, and a washer 14, supported

under the car-body, the rear end of this bar having a head or nut 15 and its forward portion being extended through the rear end of the draw-head and into the same, where it is provided with an eye 16, standing on edge within the draw-head.

17 17 are slots formed in opposite sides of the draw-head near its rear end, there being bushings 18 around these slots within the draw-head, and 19 is a pin passing transversely through said slots and intermediate them through the eye 16 in the draw-bar, being held from displacement by a key or pin 20, as seen in Fig. 1.

21 designates a hook located within the draw-head near its forward end, and 22 is a spring within the box 4, bearing the front end of the hook normally downward.

23 is the hook proper, 24 a bend in the body of the hook, and 25 a chain or cord leading from the hooked end upward through the opening 10 in the cover, whereby this end may be raised when desired. At its rear end the hook-body has an eye 26 standing on edge, and through this eye passes a pin 29, which is held in the eye by a key 30, as seen in Fig. 1, while 27 27 are holes in opposite sides of the draw-bar reinforced within said draw-bar by integral bushings 28 and loosely receiving the opposite ends of said pin 29. In the lower side of the draw-head is a slot 1', through which the draw-bar and hook are inserted and removed, (the pivot-pins being withdrawn,) and near the front end there is a hole 2' in the bottom of the draw-bar for the reception of the tip of the hook when in locking position, while the head of the hook at this time rests against the interior of the front end of the draw-head, as at 4'. The holes 1' and 2' also serve to allow dirt to fall out of the draw-head, so that its interior is kept automatically clean.

Journaled transversely through the draw-head at the proper point is a shaft 31, carrying a cam 32, adapted to strike under the hook just beneath its bend 24, and one or both ends of this shaft may be carried outward to the sides of the car and cranked, as usual, or one or both ends may have cranks 33, as shown, provided with eyes 34, from which a chain may lead to the platform or top of the car if the chain 25 be not employed.

All parts are of the desired sizes, shapes, proportions, and materials, and considerable change in the specific details of construction or addition thereto may be made without departing from the principle of my invention. Said parts being put in place—the removable ones passed inward through the slot 1' and secured by the pins 19 and 29, which latter are locked by their keys 20 and 30—the whole is attached in the usual and well-known manner beneath a car-body and is ready for operation. When the link 3 is passed into the mouth 2, it strikes the beveled front end 21' of the hook and causes such front end to rise around its pivot 29 and against the tension of the spring 22. As soon as the link passes under and behind the point of the hook the spring throws the latter downward until its tip rests within the hole 2' and its head against the shoulder 4' within the draw-head, and thereafter a pull on the link draws the hook strongly and firmly against two parts of the head above and below the link where it connects with the hook, and not only is disengagement by accident prevented, but the strongest possible resistance to the pull is afforded. When it is desired to uncouple, this is effected by turning one of the cranks 33 to raise the cam 32 or by pulling upward on the chain 25, either of which will cause the hook to rise and free the link.

What is claimed as new is—

1. In a car-coupling, the combination with

a box-shaped draw-head having a slot in its bottom, and in its sides a pair of alined holes and a pair of alined slots, and integral bushings surrounding the inner ends of said holes and side slots; of a hook having an eye at its rear end, a draw-bar having an eye at its front end, all said parts being of a size to pass through the bottom slot, transverse pivot-pins for said eyes with their ends engaging the side openings, and a key through each eye into its pin, as and for the purpose set forth.

2. In a car-coupling, the combination with a box-shaped draw-head having the rear portion of its top fast and undercut at its front end, an integral box rising from the front end of the draw-head and communicating interiorly therewith, and a hook pivoted within the draw-head; of a cover comprising a rear portion with its rearmost extremity shaped to fit the undercut portion, an upright portion adapted to close the rear of the box, and a forward portion adapted to close the top of the box, means for holding the front end of the cover removably in place, and devices substantially as described for raising the hook when desired, as and for the purpose set forth.

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

FRANÇOIS DUPLAISIR.

Witnesses:

FRANK S. PETTINGILL,
LUKE DILLON.