

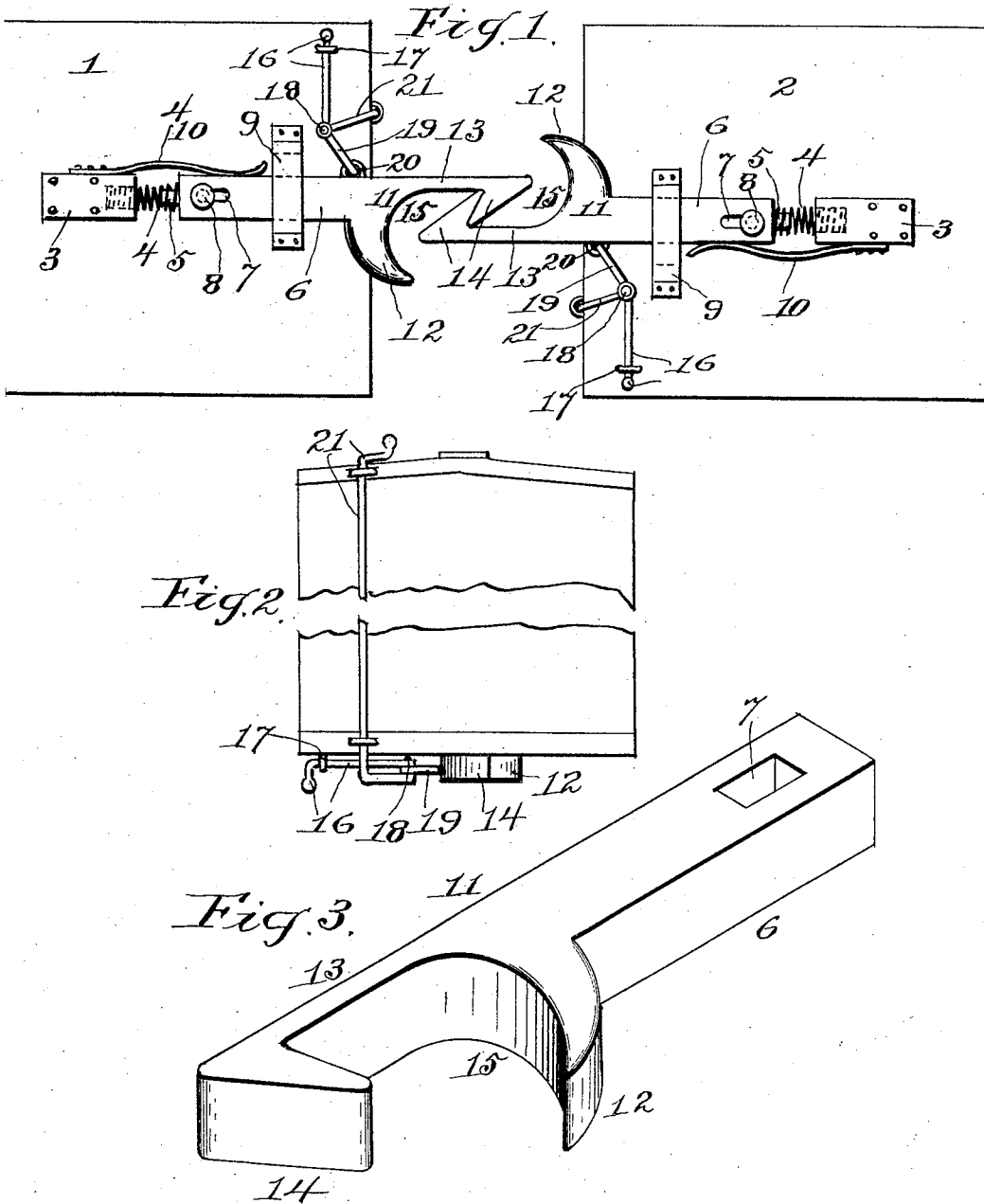
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J. J. SWINT.
AUTOMATIC CAR COUPLING.

APPLICATION FILED MAR. 9, 1904.

NO MODEL.



Witnesses

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JESSE J. SWINT, OF STROUD, ALABAMA.

AUTOMATIC CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 771,105, dated September 27, 1904.

Application filed March 9, 1904. Serial No. 197,354. (No model.)

To all whom it may concern:

Be it known that I, JESSE J. SWINT, a citizen of the United States, residing at Stroud, in the county of Chambers and State of Alabama, have invented certain new and useful Improvements in Automatic Car-Couplings, of which the following is a specification.

This invention relates to car-couplings, and pertains especially to the class of couplings having pinless interlocking jaws automatically locked or coupled by the movement of the cars toward each other.

The object of the invention is to provide a car-coupling of such novel and peculiar construction and arrangement of parts that cars may be coupled automatically by bringing the cars together and held in coupled position without employing coupling-pins or any such device and to provide a coupling-head which will permit lateral as well as longitudinal movement or play of the cars without becoming uncoupled.

With these and various other objects in view the invention consists in the novel construction and arrangement of parts and particularly in the peculiar shape or form of the draw-bar head.

In the accompanying drawings, forming part of this application, Figure 1 is an under side plan view of the adjacent ends of two railway-cars with my improved coupling applied thereto. Fig. 2 is an end view of the car, showing my operating-levers. Fig. 3 is a detail perspective view of one of the draw-bars, showing my improved draw-bar head.

The same numeral references denote the same parts in the several views of the drawings.

The draw-bars and their attachments being the same in every particular, only one of them will be herein described in detail.

The bottom of the cars 1 and 2 are each provided with a block 3, holding one end of a spiral spring 4, the other end of the spring having working therein a boss 5, formed on the rear end of the draw-bar 6. Adjacent said rear end a slot 7 is formed in the draw-bar for a pivot guide-post 8. A keeper 9 is provided through which the draw-bar works. A plate-spring 10 has one end secured to the block 3, overreaches the spring 4, and its other

end bears upon the draw-bar forward of the pivot-post 8.

The draw-heads being of the same construction and operating the same, except that one is placed in reverse position to the other, only one of them will be particularly described.

The draw-head 11 is formed by extending the draw-bar straight out from a convex-concaved bumper-jaw 12 and terminating the straight portion 13 in a half-arrow-shaped hook 14. The jaw 12 is of such length as to stop the travel of the hook on the opposite draw-bar and confine said hook in the opening 15, so that the two hooks will interlock and the said jaw and hook form concaved bearings.

The means for uncoupling from the top of a car and from the side thereof consists of a hand-lever 16, working through an eye 17 and extending out to the side of the car and loosely pivoted at 18 to a link 19, pivoted at 20 to the draw-bar. A hand-lever 21 extends from the pivot 18 to the top of the car for operating the coupling from the top of the car.

It is obvious that in coupling the hooks striking each other work the draw-bars laterally on their pivot-posts and permit the hooks to drop into the opening 15, where they are confined in locked position by the jaws 12. By working either of the hand-levers the hooks are unlocked.

It will be observed that the train in making sharp turns or sudden irregular motion the coupling will not be disturbed, as the pivot arrangement of the draw-bars permits sufficient lateral play thereof to prevent uncoupling, that the openings 15 permit a longitudinal movement of the draw-bars, and the jaws prevent dislodgment of the hooks from the said openings. It will be further observed that in case of derailment of an engine or car the device will readily uncouple, owing to the lateral movement of the derailed car.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an automatic car-coupling comprising draw-bars having a slot by which they are pivoted to swing laterally and to slide longitudinally, plate-springs overreaching the slots and engaging the draw-bars to return them, draw-

bar heads having a jaw, and a hook, the latter and the jaw projecting toward each other to leave an opening therebetween.

2. The combination, with the spring-controlled draw-bars having a pivot-slot, a head formed by a straight extension of the draw-bars terminating in a hook, and a curved jaw projecting from the draw-bar toward the hook to form an opening, of means for uncoupling
10 comprising links pivoted to the draw-bars, and

a pair of hand-levers pivoted together and to each of the links, substantially as shown and described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

JESSE J. SWINT.

Witnesses:

W. C. BURKES,
J. A. THOMPSON.