L. THAMAS.

CAR COUPLING.

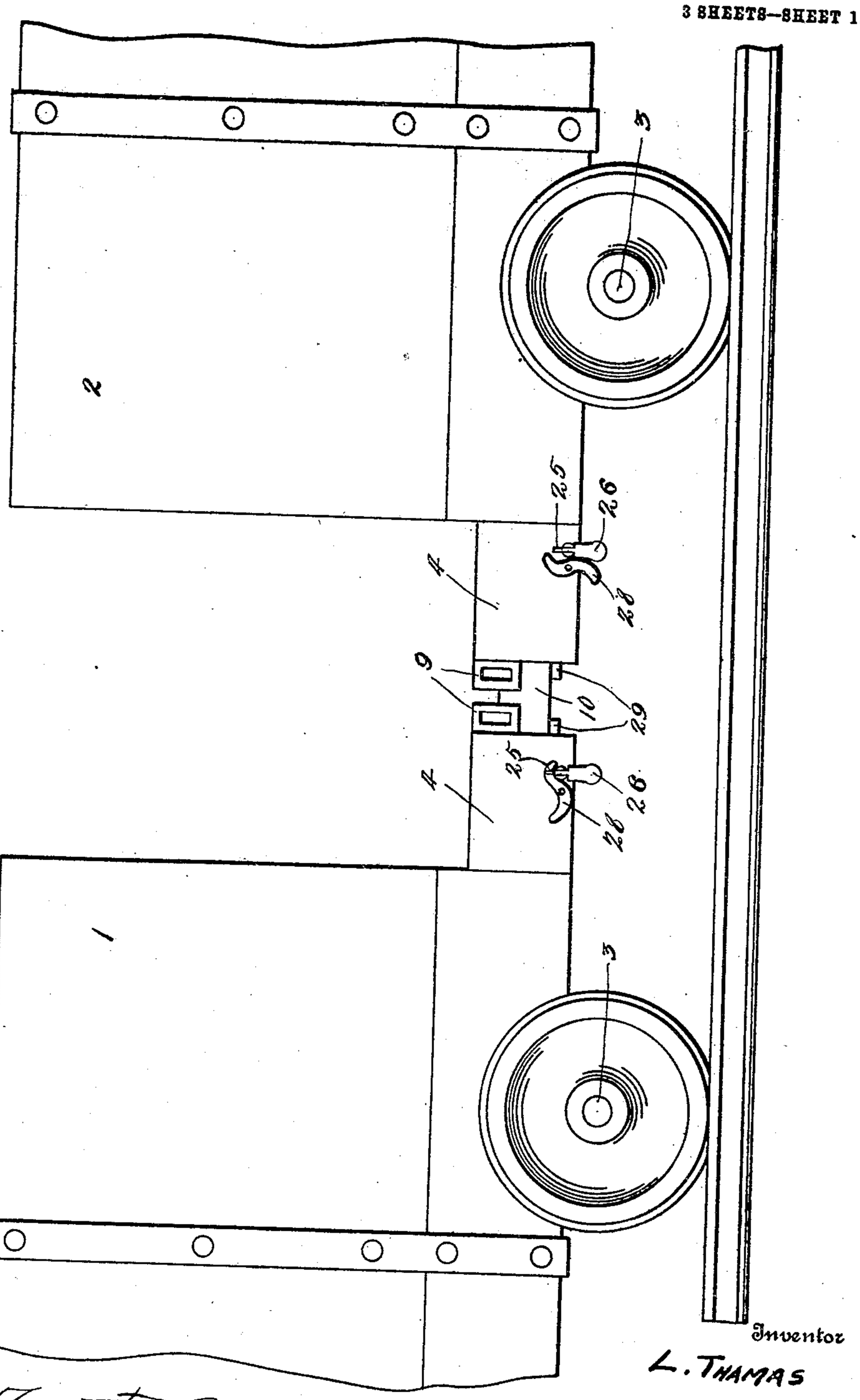
APPLICATION FILED MAY 7, 1909.

935,563.

Patented Sept. 28, 1909.

3 SHEETS—SHEET 1.

Fig. 1.



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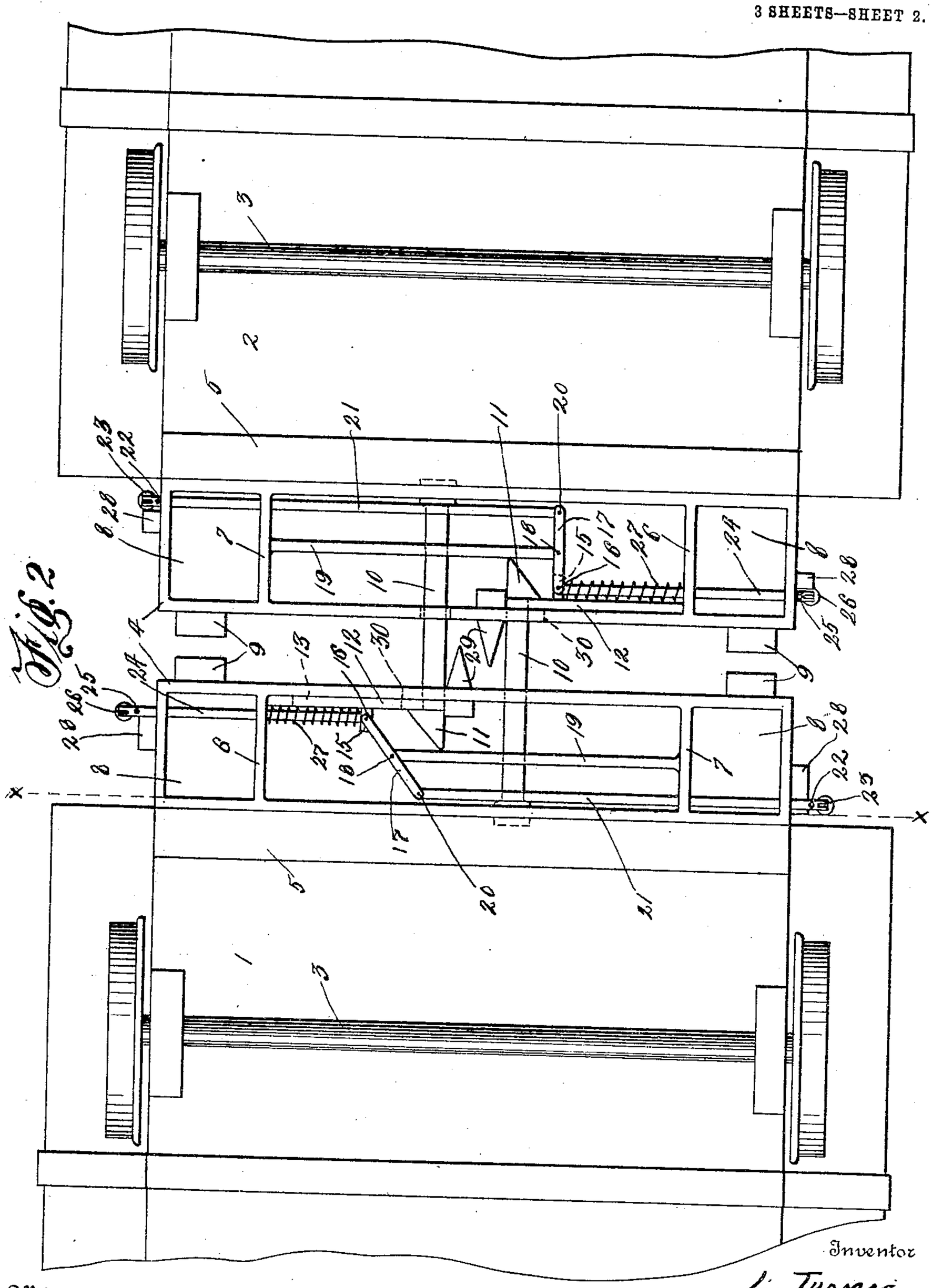
3 SHEETS—SHEET 2.

Fig. 2



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3 SHEETS—SHEET 3.

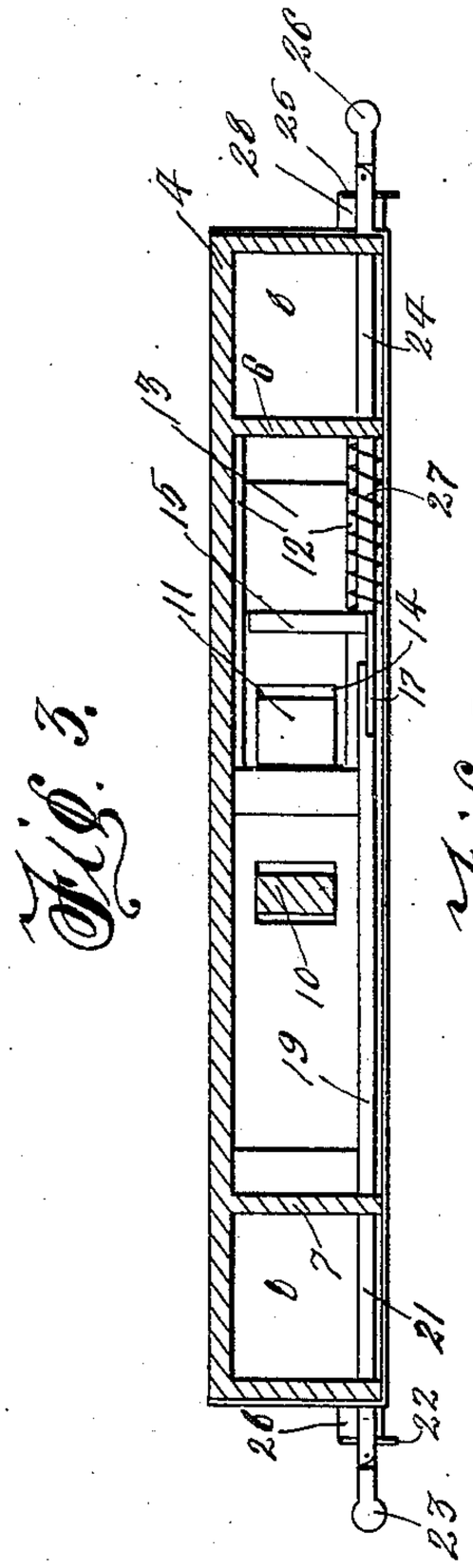

Fig. 3.

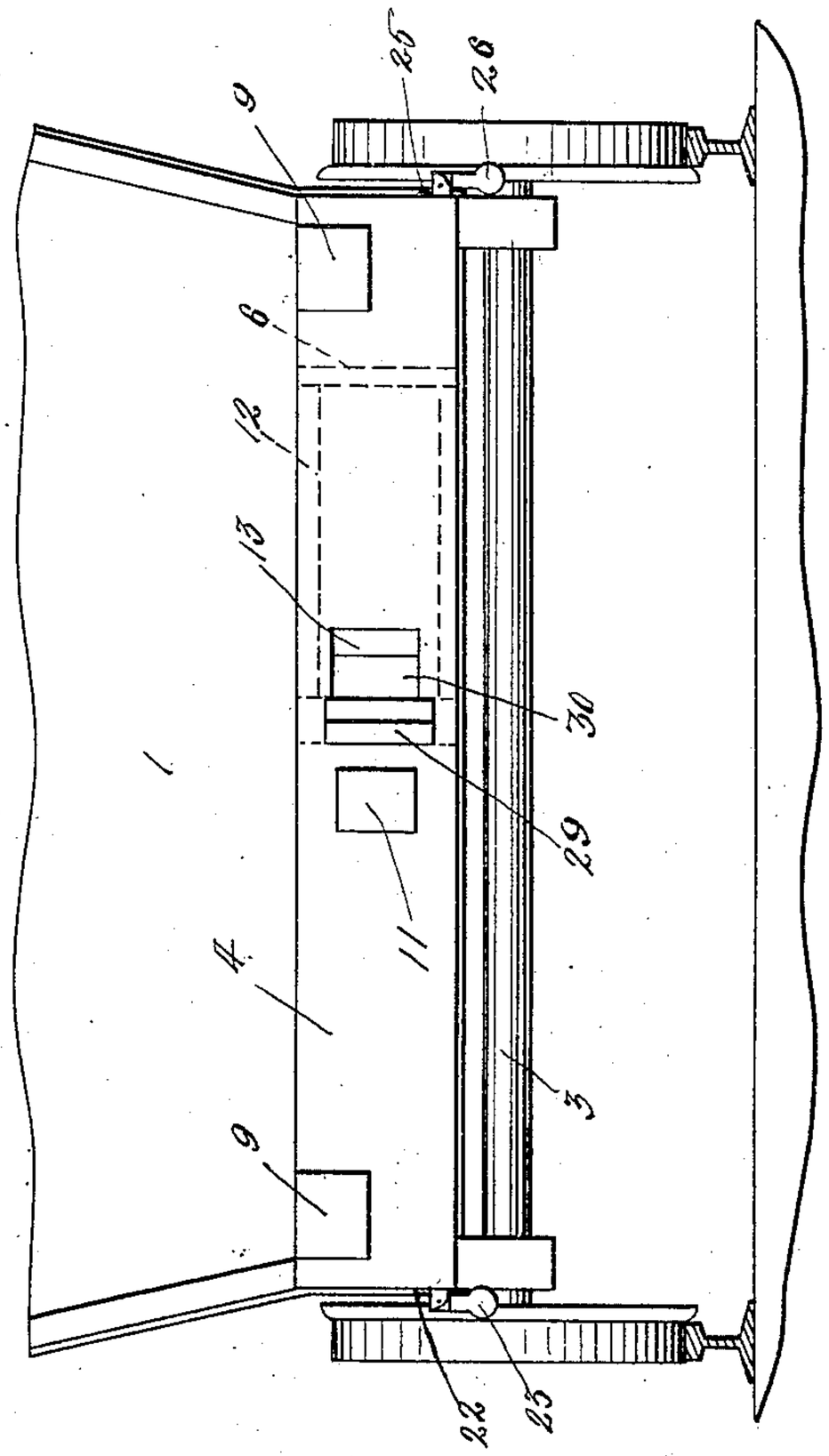

Fig. 4.

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UNITED STATES PATENT OFFICE.

LOUIS THAMAS, OF NEW BRUNSWICK, NEW JERSEY.

CAR-COUPLING.

935,563. Specification of Letters Patent. Patented Sept. 28, 1909.

Application filed May 7, 1909. Serial No. 494,553.

To all whom it may concern:

Be it known that I, LOUIS THAMAS, a citizen of the United States of America, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to car couplers, and the object of the invention is to provide an automatic coupler that can be set whereby two cars can be quickly coupled together without necessitating the attention of a brakeman, particularly between the cars, thereby eliminating all danger of trainmen being crushed or killed when coupling cars.

Another object of this invention is to provide a strong and durable coupler applicable to various types of cars, particularly freight cars, wherein a novel mechanism is employed for placing the coupler in an operative or inoperative position, the latter position being desirable when switching cars, for instance, when making a "flying" switch.

These and such other objects as may hereinafter appear are attained by a car coupler of a novel design, the design herein shown being particularly adapted for pit or freight cars.

The invention will be hereinafter considered in detail and then specifically pointed out in the appended claims, and reference will now be had to the drawings forming a part of this application, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof can be varied or changed as to the size, shape and manner of assemblage without departing from the spirit of the invention.

In the drawings:—Figure 1 is a side elevation of the confronting ends of two cars equipped with the coupler, Fig. 2 is a bottom plan of the same, Fig. 3 is a longitudinal sectional view of one of the couplers taken on the line X—X of Fig. 2, and Fig. 4 is an end view of one of the couplers.

In the drawings, 1 and 2 denote the bodies of two cars supported by trucks 3.

4 designates oblong coupler casings carried by the end sills 5 of the cars 1 and 2. Each casing at the ends thereof is provided with transverse partitions 6 and 7 providing the casing with buffer compartments 8 for buffers 9, these buffers being of the ordinary and well known type employed for preventing car couplers from being injured by cars suddenly contacting.

10 designates a draw bar fixed in the casing 4 and having the outer end thereof provided with a beveled coupler head 11, which is adapted to enter the coupler casing of an adjoining car. The draw bar 10 at one end of the car is at one side of the longitudinal axis of the car, while the draw bar at the opposite end is upon the opposite side of the longitudinal axis, whereby the draw bars at the confronting ends of two cars will not contact and interfere with one another, each entering the coupling casing of an adjoining car.

12 designates longitudinal guides upon the inner side of each coupler casing and slidably mounted between these guides is a latch 13 having a bifurcated end 14 to receive the coupler head 11 of an adjoining car. The latch 13 is provided with a right angular extension 15 and pivotally connected to said extension, as at 16, is an arm 17 pivotally connected, as at 18, to a bracket 19, carried by the partition 7 of the coupler casing. The opposite end of the arm 17 is pivotally connected, as at 20, to a rod 21 extending through the partition 7 and the end of the coupler casing, said rod having the end thereof provided with a vertical pin 22 and a pivoted handle 23. 24 designates another rod having the inner end thereof connected to the right angular extension 15, said rod extending through the partition 6 and the end of the coupler casing, where said rod is provided with a pin 25 and a pivoted handle 26.

27 designates a coil spring encircling the rod 24 between the extension 15 and the partition 6, said spring normally maintaining the latch in a closed position and in engagement with the coupler head extending into the coupler casing containing said head.

29 designates deflectors carried by the coupler casings 4 adjacent to the openings 30 formed in said casings for the coupler heads 11, said deflectors guiding the coupler heads 11 into the openings should said heads not longitudinally aline with the openings when two cars are pushed together for coupling purposes.

In operation, the beveled coupler heads 11 are adapted to enter the openings 30 and move the latches 13 until said heads have completely entered the coupler casings, said

latches then assuming their normal position to lock the coupler heads within the casings. To uncouple the cars, either of the rods 21 or the rods 24 at one side of the cars can be pulled outwardly, through the medium of the handles 23 and 26 to move the latches 13 and release the coupler heads 11. Should it be desired to lock the latches 13 in an open position, the pivoted keepers 28 are swung downwardly between the ends of the pins 22 and the ends of the casings 4, thus maintaining the coil springs 27 under tension. These springs are adapted to immediately close the latches 13 when the keepers 28 are swung out of the path of the pins 22 and 25.

The pivoted handles 23 and 26 permit of the coupling mechanism being easily manipulated, and with the pivoted handles in a lowered position all danger of the handles contacting when the cars are en route is eliminated.

It is thought that the operation and utility of the car coupler will be fully understood without further description, and I reserve the right to make the coupling mechanism of strong and durable metal capable of withstanding the rough usage to which such a mechanism is subjected by the bumping and jarring of cars.

Having now described my invention what I claim as new, is:—

1. In a car coupler, coupler casings, said casings having openings formed therein, draw bars mounted in said casings, beveled coupler heads carried by said draw bars and adapted to enter the openings of confronting casings, latches movably mounted in said casings for engaging said coupler heads, rods arranged in said casings for moving said latches within said casings, said rods extending through the ends of said casings, pins carried by the outer ends of said rods, pivoted keepers carried by the ends of said casings and adapted to be swung into engagement with the pins of said rods for holding the latches in an open position, and means within said casings for normally maintaining the latches thereof in a closed position.

2. In a car coupler, coupler casings, said casings having openings formed therein, draw bars mounted in said casings, beveled coupler heads carried by said draw bars and adapted to enter the openings of confronting casings, latches movably mounted in said casings for engaging said coupler heads, rods arranged in said casings for moving said latches within said casings, said rods extending through the ends of said casings, pivoted handles carried by said rods, pins carried by the outer ends of said rods, pivoted keepers carried by the ends of said casings and adapted to be swung into engagement with the pins of said rods for holding the latches in an open position, deflectors carried by said casings adjacent to said openings for guiding said coupler heads into said casings, and means within said casings for normally maintaining the latches thereof in a closed position.

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

LOUIS THAMAS.

Witnesses:

WALTER P. DEY,

ANDREW SALONTAE.