

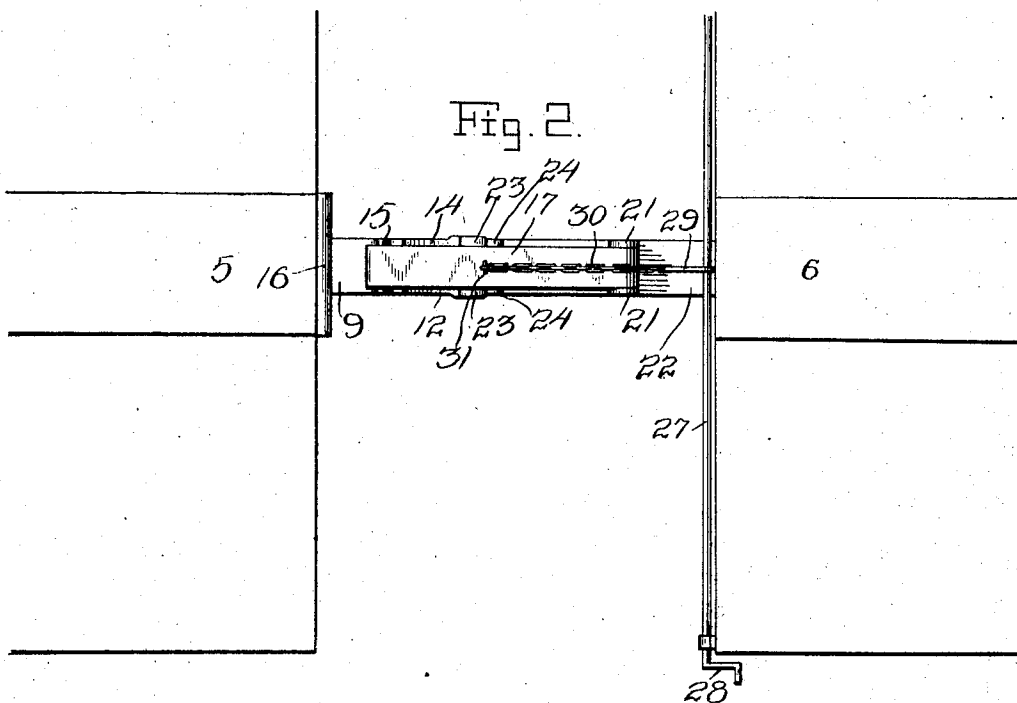
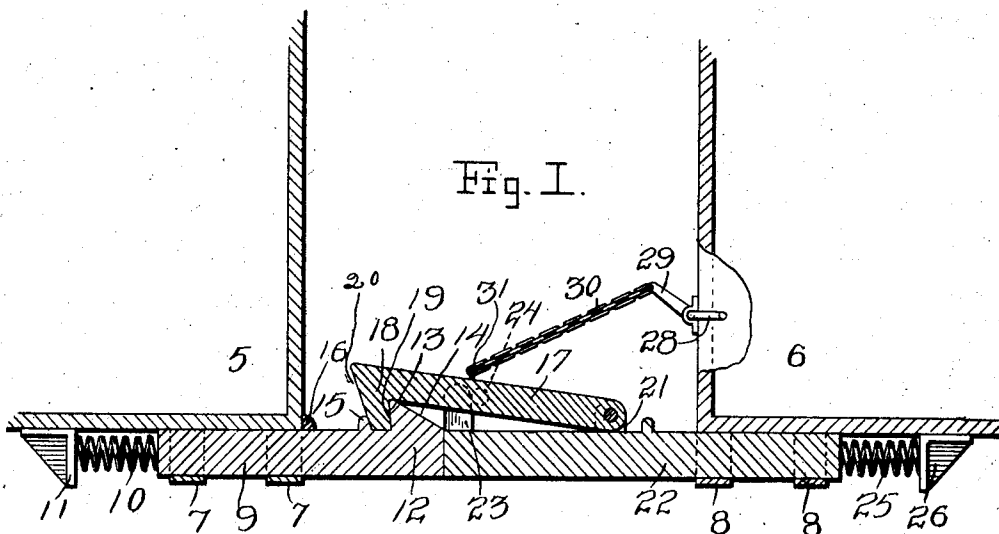
No. 761,537.

PATENTED MAY 31, 1904.

I. G. NUTT.
CAR COUPLING.

APPLICATION FILED MAR. 30, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 761,537, dated May 31, 1904.

Application filed March 30, 1904. Serial No. 200,778. (No model.)

To all whom it may concern:

Be it known that I, IVORY G. NUTT, a citizen of the United States, residing at Gainesville, in the county of Greene, State of Arkansas, have invented certain new and useful Improvements in Car-Couplers; and I do hereby 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 car-couplers, and more particularly to the class of automatic couplers, the object of the invention being to provide a construction in which the coupling of the cars will be insured when they are brought together, in which the cars will be held securely together under normal conditions, and in which the cars will be uncoupled should one of them leave the track, so as to swing sidewise at an angle to the other.

A further object of the invention is to provide a construction which will be simple and durable and in which lost motion between the cars will be prevented.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in both views, Figure 1 is a vertical section taken longitudinally through the draw-heads of two cars embodying the present invention. Fig. 2 is a top plan view of the structure shown in Fig. 1.

Referring now to the drawings, there are shown two cars 5 and 6. To the under side of the body of the car 5 are connected the hangers 7, while similar hangers 8 are connected to the under side of the car 6. In the hangers 7 is slidably mounted a draw-bar 9, the inner end of which rests against a helical spring 10, which in turn rests against and is secured to a depending bracket 11 on the bottom of the car, so that the draw-bar is held normally and yieldably at the forward limit of its movement. The draw-bar 9 has a head 12, which projects above the upper face of the bar and has a rear face 13, which lies at an acute angle to the upper face of the bar, the front face of the draw-head being beveled, as shown at 14. Upon the upper face of the draw-bar and spaced rearwardly from the

face 13 of the draw-head is a transversely-extending vertical flange 15, which by engagement with the bumper 16 on the car limits the rearward movement of the draw-bar and serves also as a stop for the cooperating or latch member 17.

The member 17 is of hook shape and comprises a straight stem having a head 18 projecting downwardly therefrom, the rear face 19 of the head lying at an acute angle to the under face of the stem, while the front face of the head is beveled, as illustrated at 20.

The member 17 is hinged between the ears 21 on the upper face of the draw-bar 22, which is slidably mounted in the hangers 8 at the bottom of the car 6, the length of the stem of the member 17 being such that when said member is in horizontal position the head lies beyond the front end of the draw-bar 22. At the front end of the draw-bar 22 and projecting upwardly from its upper face are the laterally-spaced ears 23, between which the stem of the member 17 is received when in horizontal position, and from the sides of the stem project the arms 24, which engage behind the ears 23, so that the strain on the member 17 is not entirely upon its pivot.

Against the rear end of the draw-bar 22 is disposed a helical spring 25, the opposite end of which rests against and is secured to a depending bracket 26, said spring serving to hold the draw-bar normally and yieldably at the limit of its forward movement.

With the construction shown when the cars are to be coupled they are brought together end to end, so that the beveled face 20 strikes the face 14, and in moving thereover the member 17 is raised until the lower extremity of its head passes beyond the rear face 13, when the member 17 drops and engages the lower end of its head behind the upper end of the head 12, the arms 24 at the same time engaging behind the ears 23, so that the two cars are held securely together. It will be noted that when the members are engaged as described the members 17 may be disengaged from behind the head 12 if moved bodily in a lateral direction, but that so long as both cars remain on the track this movement of the member 17 cannot occur nor a corresponding lat-

eral movement of the head 12, such as would have the same result; but, however, should either car leave the track lateral bodily movement of the corresponding member 12 or 17 would result, so that the cars would be uncoupled and damage would result only to the car that jumped the track, as in its fall it would not pull the next car with it.

When the coupling members are engaged, the lower end of the head 18 lies between the head 12 and the flange 15, so that the head 18 is held against movement away from the face 13, excepting to a very limited degree.

To uncouple the cars, it will be understood that it is only necessary to raise the members 17, and for this purpose a shaft 27 is mounted transversely of the front of the car 6 and has cranks 28 at its ends by means of which the shaft may be rocked. At the central portion of the shaft 27 is an arm 29, which projects forwardly and upwardly and to the free end of which is connected a chain 30, which is connected also to the perforated lug 31 upon the member 17. With this arrangement it will be understood that when the shaft 27 is rocked in one direction the arm 29 will be swung upwardly to raise the member 17, and when the shaft is permitted to swing in the opposite direction the member 17 will be lowered to its normal position.

What is claimed is—

1. A car-coupler comprising a draw-bar having a head projecting upwardly from its forward end and a transverse flange upon its upper face upon the rear of the head and forming

an open-ended passage between it and the head, a second draw-bar having spaced ears upon the forward end portion of its upper face, a latch member comprising a stem pivoted in the rear of said ears and adapted to engage therebetween, said stem having laterally-projecting arms disposed to engage behind the ears and having a depending head at its forward end adapted to engage behind the first-named head in the passage between it and the flange.

2. In a car-coupler, the combination with a slidable draw-bar having a head projecting upwardly therefrom and an upwardly-directed transverse flange in the rear of said head, of means for holding the draw-bar yieldably at the forward limit of its movement, a bumper in the path of rearward movement of the flange, a second draw-bar having spaced upwardly-directed ears at its forward end, a latch member pivoted to the second draw-bar in the rear of the ears and adapted to engage therebetween, laterally-projecting arms upon the latch member disposed to engage behind the ears, a head for the latch member disposed to engage between the first-named head and the flange, and means connected with the latch member for swinging it out of engaging position.

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

IVORY G. NUTT.

Witnesses:

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MATT. THORN.