J. T. JENSEN.

SELF CATCHING SCREW COUPLING FOR RAILWAY CARS.
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Inventor

Jens Thomas Jensen

By Percy H. Moore.
To all whom it may concern:

Be it known that I, Jens Thomas Jensen, a subject of the King of Denmark, residing at Hjørring, Denmark, have invented a new and useful Improvement in Self-Catching Screw-Couplings for Railway-Cars; and I do hereby declare the following to be a full, clear, and exact description of the same.

The invention relates to improvements in self-catching screw coupling for railway cars.

Figure 1 shows a side view of the invention, Fig. 2 a top view of the same and Fig. 3 a longitudinal section on the line A—B (Fig. 2).

The coupling is cardan suspended on the car by means of the supporting member C, whence the pull is transmitted to the middle of the railway car. A horizontal pull in the eye D, for instance from a helical spring keeps the coupling in a substantially horizontal position.

E is a cylindrical rod which has a tooth wheel F keyed thereon and at the other end is connected with a screw-formed iron piece G, located in a displaceable cylinder H ending in two horn shaped strips or catches I. Connected with the cylinder H are two rods J ending in paws K and around the said rods are found helical springs as shown.

M is a lever pivoted at N and retained at the catch O engaged by the two-armed angle lever R, one arm of which abuts against the one-armed lever P. When the lever M is not retained by the catch O, it falls down into the position L shown in Fig. 1 in dotted lines, in which position it engages with the tooth wheel F and locks it. V is a crank which can return the arm M to the position shown in full lines and the double crank can be rotated by means of the shaft T, which extends at both sides of the railway car and can be operated from here.

When two railway cars provided with such couplings are carried against each other, the catches I will guide the cylinders and engage a notch on the ratchet wheel F, the rotation of which is hereby prevented, and the coupling is effected.

The coupling can again be released by turning of the shaft T and therewith the crank V which raises the arm L out of engagement with the tooth wheel F, which then again can rotate.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent:

1. A self catching screw coupling for railway cars comprising a rotatable screw formed element, a shaft carrying the said element and a tooth wheel, a lever adapted to engage with the said tooth wheel, means operable from both sides of the Railway car for lifting the said lever up from its locking position, means for suspension of the said coupling in substantially horizontal position and means for leading another device of the same kind into engagement with the said coupling substantially as set forth.

2. A self-closing screw coupling for railway cars comprising a rotatable screw formed element, a shaft carrying the said element and a tooth wheel, a lever adapted to engage with the said tooth wheel means operable from both sides of the railway car for disengaging the said lever from the said tooth wheel, a casing surrounding the said screw formed element and carrying spring actuated rods provided with paws, said paws being adapted to release the said lever from its lifted position substantially as set forth.

3. A self-closing screw coupling for railway cars comprising a rotatable screw formed element, a shaft carrying the said element and a tooth wheel, a lever, a bearing for said shaft, a casing slidable on said bearing enclosing said rotatable screw, said casing having means adapted to actuate said lever to cause said lever to engage said tooth wheel thereby locking or releasing the same and means for lifting the said lever up from its locking position substantially as set forth.

4. A self-closing screw coupling for railway cars comprising a rotatable screw formed element, a shaft carrying the said element and a tooth wheel, a lever adjacent the said tooth wheel, a member relatively slideable with respect to the rotatable screw adapted to cause the lever to engage with said tooth wheel, means for lifting the said lever up from its locking position, and means for suspension of the said coupling in substantially horizontal position.
5. A self catching screw coupling for railway cars comprising a rotatable screw formed element, a shaft carrying the said element and a tooth wheel, a lever adapted to engage with the said tooth wheel, means for disengaging the said lever from the said tooth wheel, a displaceable member adapted for relative longitudinal movement with respect to said screw formed element and adapted to release the said lever from its lifted position substantially as set forth.

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

JENS THOMAS JENSEN.

Witnesses:
C. V. Hogsted,
G. Dam.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."