No. 700,782. Patented May 27, 1902.

F. KÖHN.

SIDE COUPLING FOR RAILROAD CARS.

(Application filed Feb. 3, 1902.)

(No Model.)

Fig. 1.

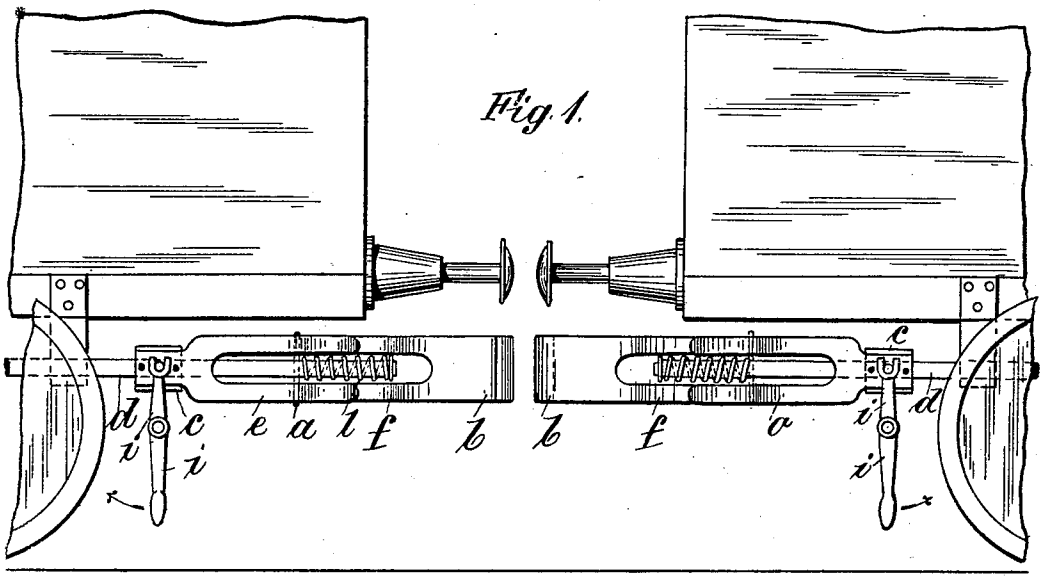
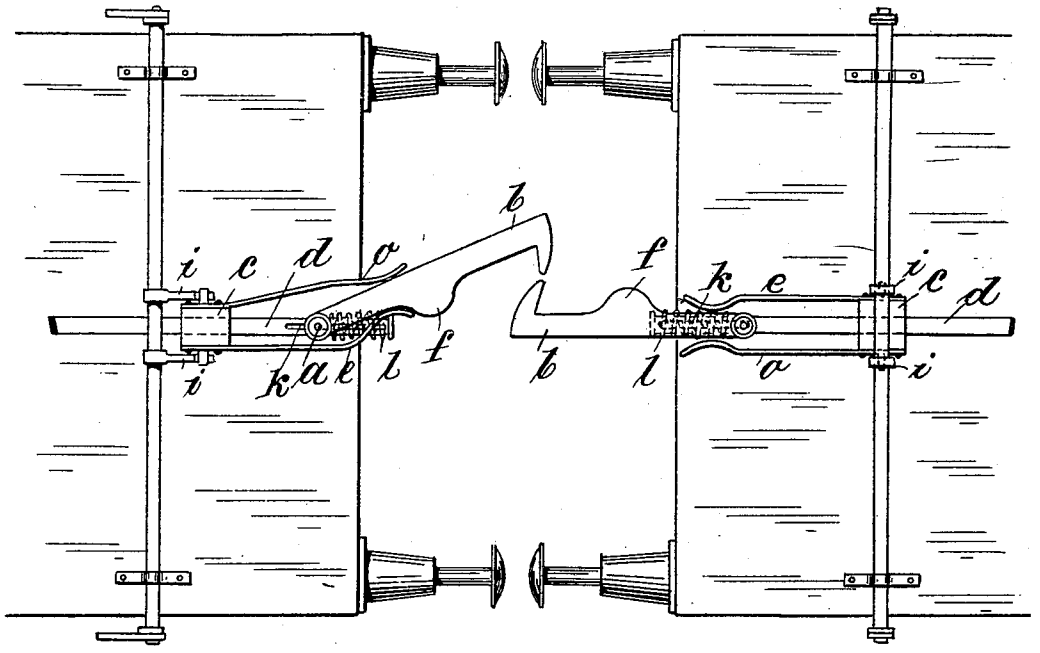


Fig. 2.



Witnesses:
Rudolf Freichel.
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per Richard Kymmann.
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UNITED STATES PATENT OFFICE.

FRANZ KÖHN, OF PLÖN, GERMANY.

SIDE COUPLING FOR RAILROAD-CARS.

SPECIFICATION forming part of Letters Patent No. 700,782, dated May 27, 1902.

Application filed February 3, 1902. Serial No. 92,385. (No model.)

To all whom it may concern:

Be it known that I, FRANZ KÖHN, a subject of the King of Prussia, Emperor of Germany, and a resident of Plön, in the Empire of Germany, have invented certain new and useful Improvements in Side Couplings for Railroad-Cars, of which the following is a specification.

This invention relates to a side or lateral coupling for railroad-cars, and has for its object various improvements in the construction of the same.

The coupling forming the subject of the present invention is distinguished from side couplings hitherto known in that the engagement of the hooks of the same takes place from the side instead of from the top.

In the accompanying drawings, Figure 1 is an elevation of the improved coupling, showing the coupling-hooks in a straight or horizontal position, while Fig. 2 is a view from the under portion of the car, showing the coupling-hooks lifted out of engagement and laterally displaced.

The construction is as follows: Upon square rods *d*, fixed to the under part or bottom of the car, sliding pieces *c* are arranged, the latter being longitudinally movable from the sides of the car by means of levers *i i* in a forward and backward direction. These sliding pieces *c* carry or are provided on one side with flat springs *e*, which upon the forward longitudinal movement of the said sliding pieces *c* by means of the lever *i* press against or bear upon the raised surfaces or shoulders *f*, provided on each of the said coupling-hooks *b*, the latter being pivoted at *a* in the said square bar *d*, whereby either the one or the other of the coupling-hooks are caused to execute a lateral turning movement, whereby the uncoupling of two cars is effected. On the other hand, the coupling of two cars takes place automatically when the hooks are not in the before-mentioned displaced position or, in other words, when the front surface of the hooks can slide against each other upon the impact of two cars, in which case the hooks will snap into engagement and effect the said coupling. The counter-springs *o*, arranged on the opposite side of the sliding pieces *c*, have the purpose of keeping the coupling-hooks *b* in the straight position. Lastly, to impart to the hooks a certain resilience of their movement the pivots *a* are arranged to slide in slots *k* of the carrying-bars *d*, spiral springs *l* being arranged around the latter.

What I claim, and desire to secure by United States Letters Patent, is—

In a side coupling for railroad-cars, the combination of a square bar *d*, arranged underneath the car, sliding pieces *c*, adapted to be longitudinally displaced by lever mechanism *i* exterior of the car, horizontal coupling-hooks *b*, pivoted in a slot of the bar, the said hooks having slanting impact-surfaces and being provided with lateral elevations or shoulders *f* against which flat springs *e*, arranged upon the said sliding pieces, are adapted to bear, upon the forward movement of the sliding pieces *c*, whereby the coupling-hooks are laterally displaced, and of counter-springs *o* adapted to bring back and retain the hooks in a parallel position with the bar *d*, all essentially as and for the purpose set forth.

In witness whereof I have hereunto signed my name, this 18th day of January, 1902, in the presence of two subscribing witnesses.

FRANZ KÖHN.

Witnesses:
HENRY HASPER,
WOLDEMAR HAUPT.