

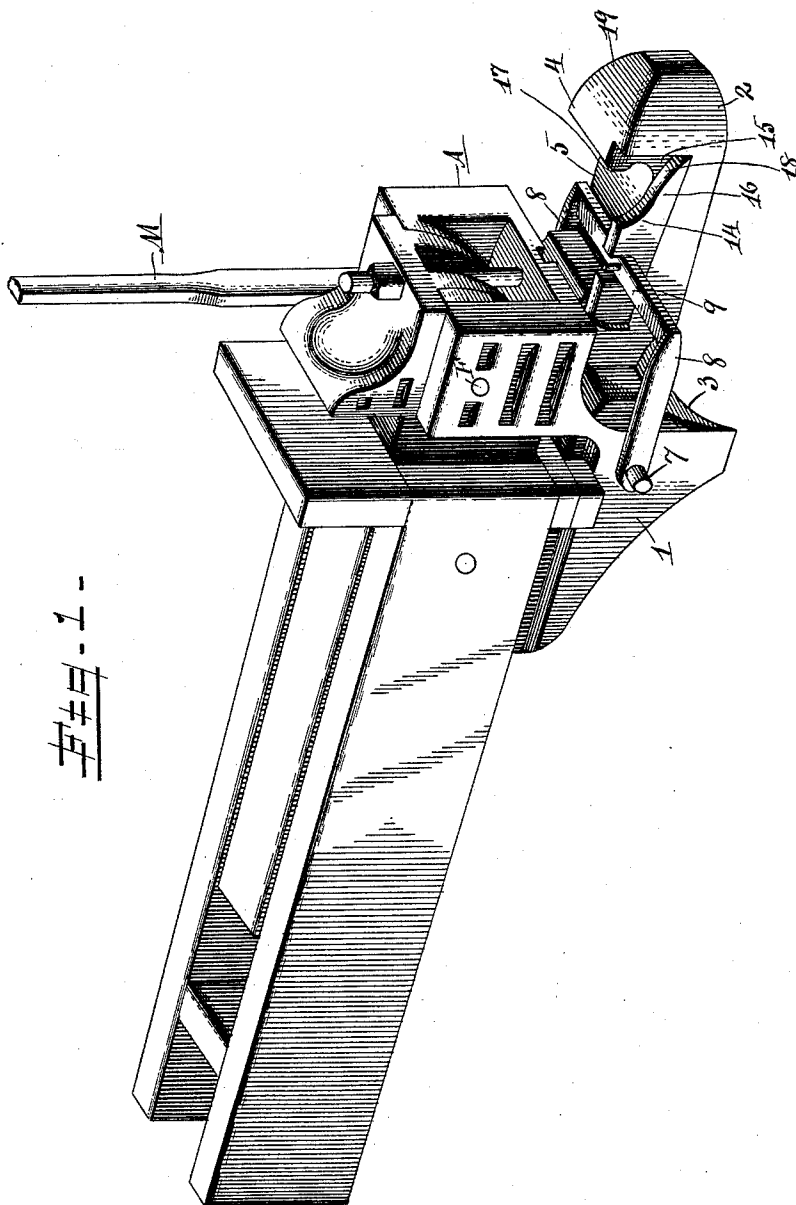
(No Model.)

3 Sheets—Sheet 1.

J. A. BOSCH.
CAR COUPLING.

No. 465,554.

Patented Dec. 22, 1891.



Witnesses

A.B. Blackwood
Carter & Smell.

Inventor

John Albert Bosch
by J. A. Soule ^{Pres} & Co.,
his Attorneys

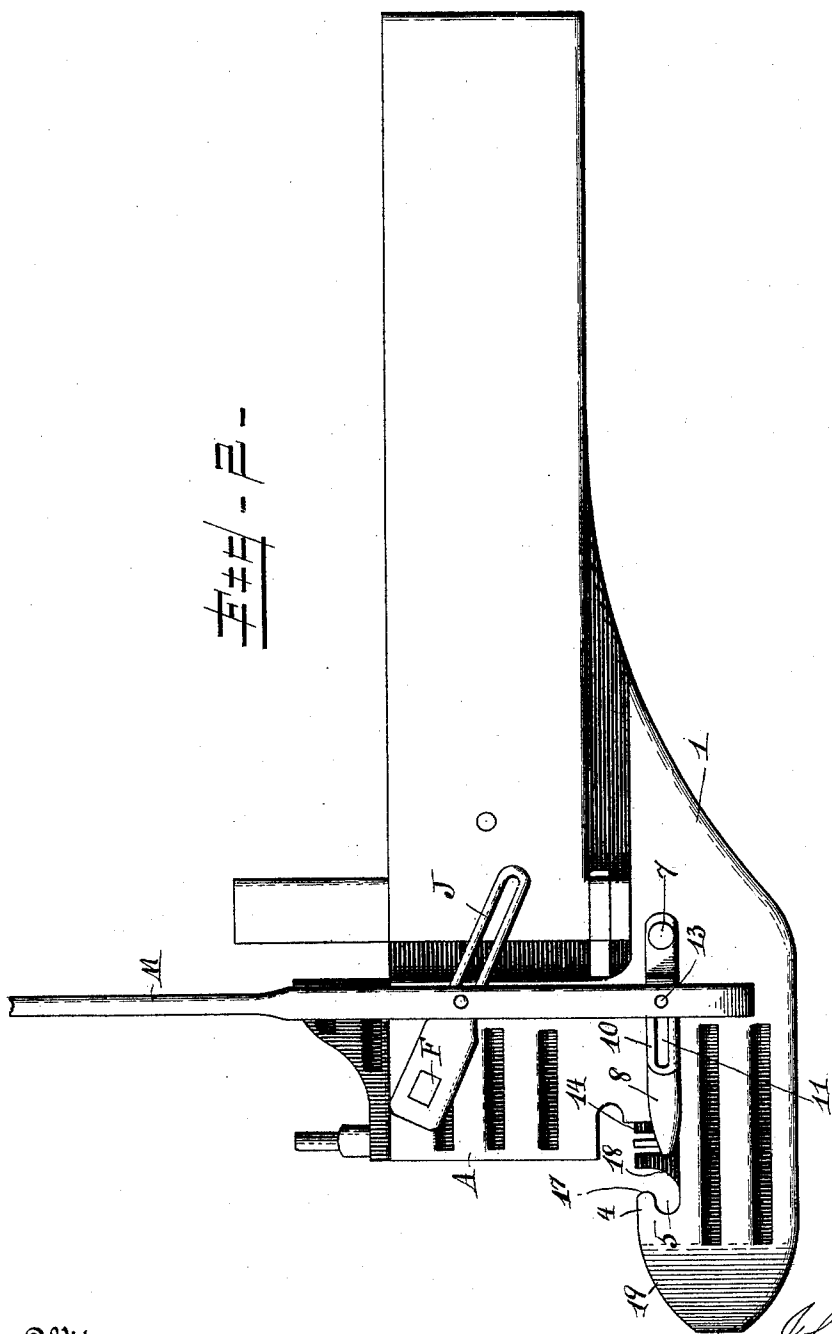
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3 Sheets—Sheet 2.

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CAR COUPLING.

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Patented Dec. 22, 1891.



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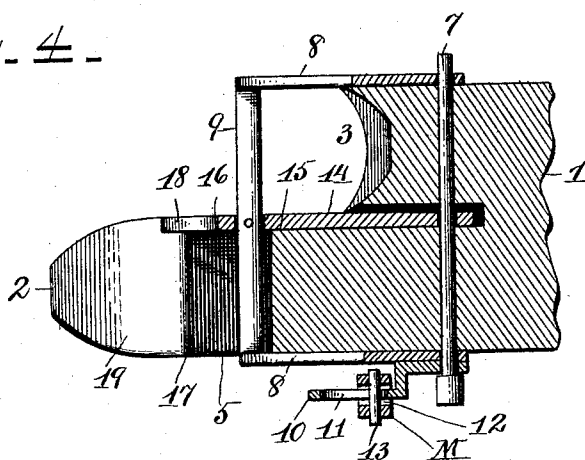
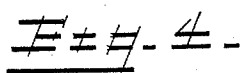
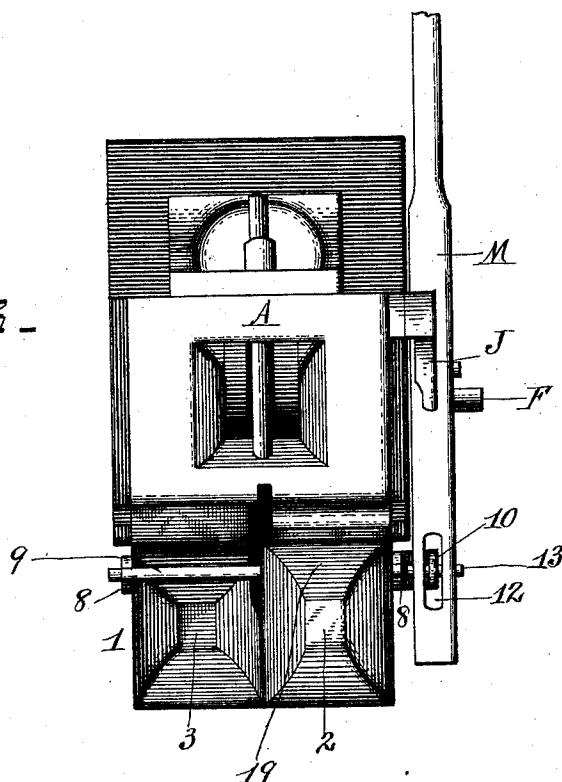
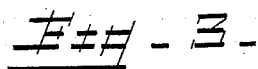
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3 Sheets—Sheet 3.

J. A. BOSCH.
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Witnesses
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UNITED STATES PATENT OFFICE.

JOHN A. BOSCH, OF MARYVILLE, MISSOURI.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 465,554, dated December 22, 1891.

Application filed July 27, 1891. Serial No. 400,786. (No model.)

To all whom it may concern:

Be it known that I, JOHN ALBERT BOSCH, of Maryville, Nodaway county, Missouri, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had to the accompanying drawings, wherein—

Figure 1 is a side view of the improved coupler. Fig. 2 is a front view. Figs. 3 and 4 are views of parts in detail.

The present invention relates to improvements on the car-coupler shown in Letters Patent of the United States No. 367,586, granted to me August 2, 1887.

In the accompanying drawings, A is the draw-head, which is mounted and equipped with the same devices as shown in said patent, F being the rotary shaft, J the slotted lever, and M the lower portion of the vertical slotted vertically-movable operating-rod of said patent, which parts are arranged to be operated and placed upon the car in the same manner as the corresponding parts in said patent.

The present improvements consist in supplementary coupling devices additional to the coupling and uncoupling devices shown in said patent.

Connected to the bottom of the draw-bar A and preferably integral therewith is a downwardly-extending metallic bracket 1, having at one side of its center a nose 2, which projects below and beyond the face of the draw-bar A, and on the opposite side of its center a recess 3 to accommodate and receive the corresponding nose 2 on the draw-bar of an adjacent car. The nose 2 has an upwardly-extending portion 4 and a recess 5 immediately behind it, whereby said portion 4 constitutes a hook. The nose 2 is downwardly-beveled at 19 in front of said hook.

Extending crosswise of the bracket 1 and journaled therein is a cross-shaft 7, on the opposite ends of which, exterior to said bracket, are pivoted two longitudinal arms 8 8, which are connected at their forward ends by a cross-bar 9, extending in front of the body of the bracket, said arms 8 8 and cross-bar 9 constituting a swinging bail. Rigidly secured to the bail on one side is a crank-arm 10, having a longitudinal slot 11. Said crank-arm 10 en-

ters a vertical slot 12 in the vertically-movable operating-rod M, while a pin 13 on said rod M passes through said slot 11. By lifting the rod M the bail 8 8 9 can be lifted, and by releasing the rod M the bail 8 8 9 resumes by gravity its lowermost position. The slot 11 permits the longitudinal movement of the draw-bar A without affecting the rod M. By connecting the rod M in the manner shown in my patent aforesaid the bail can be lifted from the top or from either side of the car and can be maintained in its elevated position when desired. When the bail 8 8 9 is in its normal lowest position, its front horizontal cross-bar lies in the recess 5 behind the hook 4, and crosses the cavity or recess 3.

Pivottally connected to the shaft 7 is a bail-lifter 14, which extends forward and lies in a longitudinal channel or recess 15, formed at one side of and in the nose 2. This bail-lifter is connected to the bar 9 of the bail, passing beneath the same, whereby it moves with the bail, and it has a projecting portion 16 extending forward of the vertical edge 17 of the hook, and this projection 16 has an inclined or beveled upper surface 18. When two cars equipped with these coupling devices approach, they will be coupled by the coupling devices of my aforesaid patent, and also by the coupling devices herein specified. The noses 2 of the approaching cars enter the cavities 3 of the opposite cars, respectively, and the beveled surface 19 of each nose encounters and lifts the bail 8 8 9 of the opposite car, so that the bail of each car passes and drops behind the hook 4 of the opposite car and rests in the recess 5. The recess 5 is of sufficient length to permit the two bails to lie alongside each other therein. It will be noted that when two cars are coupled the cross-bar 9 of the bail of each car will lie just above the beveled upper face 18 of the forward projection 16 of the bail-lifter 14 of the opposite car. Accordingly when the bail 8 8 9 of one car is lifted its bail-lifter will rise and lift the bail of the opposite car out of the recess 5, so that the upward movement of either bail will uncouple the cars.

I claim as my invention—

1. The nose 2, having hook 4 and recess 5, in combination with bail 8 8 9, crank-arm 10,

having slot 11, and rod M, having pin 13, entering said slot, substantially as set forth.

2. The bracket 1, having cavity 3 and nose 2, with hook 4 and recess 5, in combination
5 with swinging bail 8 8 9 and bail-lifter 14, connected with said bail and extending forward of said bail, so as to lie beneath the bail of a coupled car, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN A. BOSCH.

Witnesses:

WILLIAM H. HAWKINS,
JOHN B. KILDOW.