

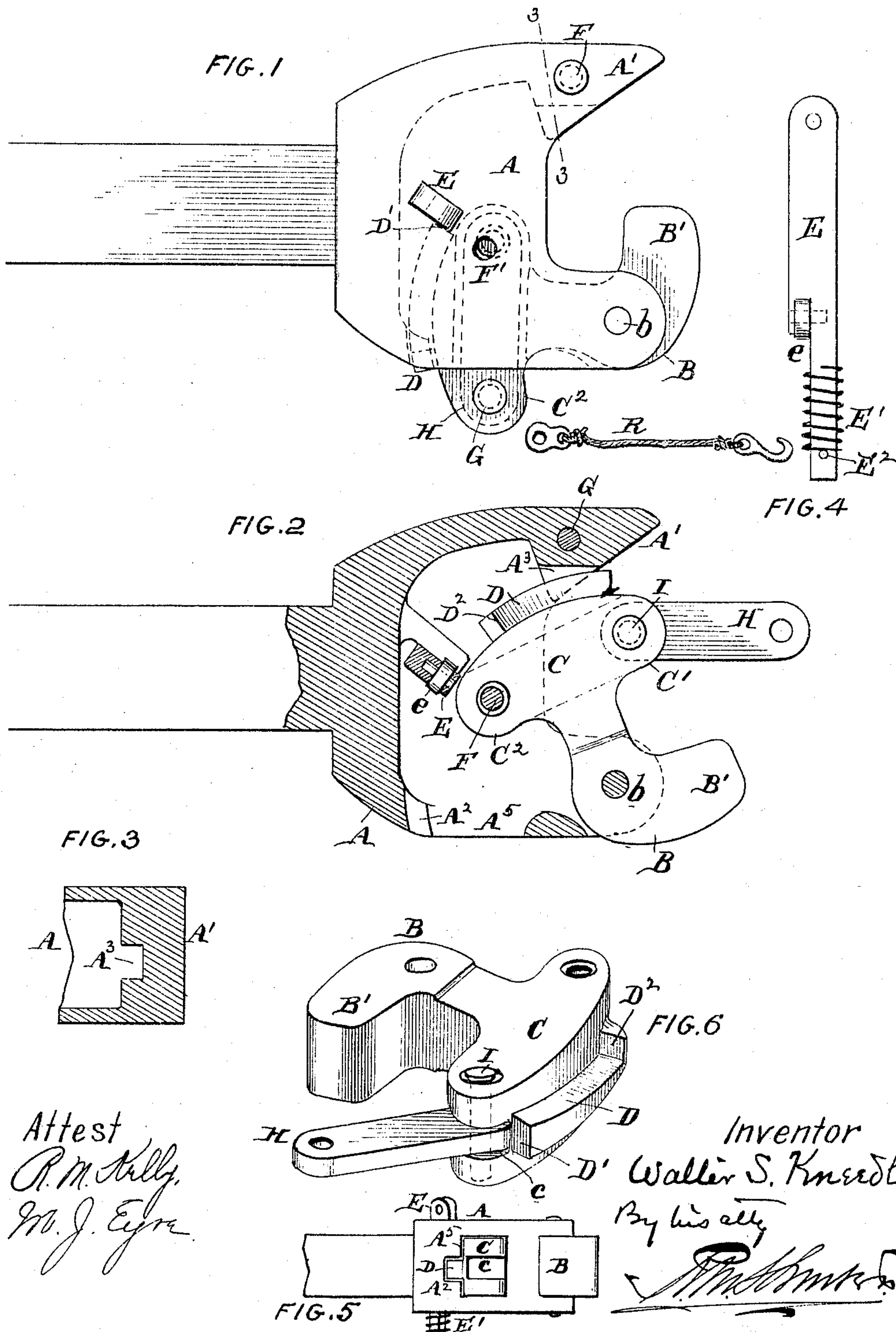
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PATENTED NOV. 29, 1904.

W. S. KNEEDLER.
CAR COUPLING.

APPLICATION FILED JULY 27, 1904.

NO MODEL.



UNITED STATES PATENT OFFICE.

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CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 776,333, dated November 29, 1904.

Application filed July 27, 1904. Serial No. 218,376. (No model.)

To all whom it may concern:

Be it known that I, WALTER S. KNEEDLER, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improvement in Car-Couplings, of which the following is a specification.

My invention has reference to car-couplings; and it consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

Heretofore it has been customary in the "Janney coupling" and similar types to have the pivoted nose provided with a slot and pin-aperture for attaching a coupler bar or link when coupling with a car having the old link type of coupler and also when employing a coupler-bar at such times as it is necessary to shift cars in the yards on sharp curves. In the new construction of couplings of this type proposed to be employed in car equipments of a number of the large railroads the slot and pin-hole in the pivoted nose are dispensed with for the purpose of increasing the strength of the said nose, and consequently it becomes necessary to provide suitable means whereby a coupler bar or link may be employed when necessary; and my invention has for its object such provision in a coupling of the Janney type.

In carrying out my invention I provide the pivoted nose with a rear portion having locking means for locking the nose when pressed backward into coupling position for normal use, a slotted portion formed on the rear portion adapted to receive the end of a coupling bar or link for special use, and a hole also in the rear portion for receiving a locking-pin for holding the slotted portion in exposed position. My invention also embodies details of construction which, together with the features above specified, will be better understood by reference to the drawings, in which—

Figure 1 is a plan view of my improved coupling in position for ordinary use. Fig. 2 is a similar view with a portion cut away, showing the coupling when adapted for use with the coupler-bar. Fig. 3 is a sectional view of same on line 3 3 of Fig. 1. Fig. 4 is

an elevation of the locking-pin. Fig. 5 is a side elevation of the coupling, and Fig. 6 is a perspective view of the pivoted nose and coupler-bar.

A is the coupling-head and is made hollow, open on the front end and on one side, as at A⁵, and having the fixed nose A' on the other side.

B is the pivoted nose and is pivoted to the head at b.

B' is the coupling-nose and is adapted to couple with a similar nose on another coupling-head in the ordinary way. This pivoted nose has a rear end C, which is provided with a locking-lug D, having an inclined upper surface and the two shoulders D' and D², adapted to engage with the locking stop-pin E in the head. This pin E may have a roller e to reduce the friction between the pin and the inclined surface of the lug D, and a spring E' is employed to pull the pin E down into locking position, said spring pressing against the under side of the head A and against a cross-piece E² on the pin E. When the coupling is in locked position, (shown in Fig. 1,) the pin E is down in front of the shoulder D' of the lug D, and hence locks the nose against being moved forward. When set for coupling with another coupler, the nose B' is moved out until the shoulder D² comes against the pin E. On coupling the cars the nose is forced inward, and the pin E rides upward upon the inclined portion of the lug and then drops back of the shoulder D', and thus locks the nose.

The pivoted nose has its rear portion C made with the two ends C' C² and slotted, as at c, said slot extending completely through. These ends have holes for pins I and G, which may normally hold a short coupler-bar H in position between the ends, as shown in dotted lines in Fig. 1. When the coupler-bar is to be used, the pin G is withdrawn and the part C turned to the position shown in Fig. 2. When in this position, the pin I is raised and the bar H adjusted and pin I then dropped to hold the bar in extended position shown. A pin F is then lifted out of a hole in the head A and inserted through a hole F' in the head and

the hole in the end C^2 of the nose part C, from which the pin G was withdrawn, as shown in Fig. 2. This locks the rear portion C of the nose, with the slotted end C^2 exposed. If the
 5 bar H should be too short for shifting cars on very sharp curves, such as found in car-yards, a longer bar may be substituted.

The side of the aperture A^5 is notched, as at A^2 , to permit the lug D to pass, as shown in
 10 Figs. 1 and 5, and likewise the fixed nose A' is notched, as at A^3 , for the free passage of the said lug D, as shown in Fig. 2. The projecting end C^2 of the rear part of the nose may be used for attaching a rope and hook R when
 15 it is necessary to "rope" cars under special conditions in place of coupling them. In this case the part C^2 , projecting laterally from the side of the head A, as shown in Fig. 1, enables the easy attachment of the rope.

20 While I prefer the construction shown as being excellently adapted for the embodiment of my invention, I do not restrict myself to the details, as these may be modified without departing from the spirit of the invention.

25 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-coupler, a head having a pivoted nose B provided with the rear part C formed
 30 with a horizontal slotted end C' having provision for receiving a pin and coupler-bar and having vertical pin-holes, combined with locking means for locking the pivoted nose in coupling position, and independent means for
 35 securing the rear end of the nose against movement in the head when the end C' is adjusted forward into operative position.

2. In a car-coupler, a head having a pivoted nose B provided with the rear part C formed
 40 with a horizontal slotted end C' having provision for receiving a pin and coupler-bar and having vertical pin-holes, combined with locking means for locking the pivoted nose in coupling position, and means consisting of a
 45 pin F passing through the head and the rear part of the pivoted nose for securing the rear end of the nose against movement in the head when the end C' is adjusted forward into operative position.

50 3. In a car-coupler, a head having a pivoted nose B provided with the rear part C formed with a slotted end C' having provision for receiving a pin and coupler-bar and also having the inclined projection D having shoulders D'
 55 D^2 , combined with locking means for locking the pivoted nose in coupling position consist-

ing of the vertically-adjustable locking-pin E having a portion operating upon the projection D and its shoulders.

4. In a car-coupler, a head having a pivoted
 60 nose B provided with the rear part C formed with a slotted end C' having provision for receiving a pin and coupler-bar and also having the inclined projection D having shoulders D'
 65 D^2 , combined with locking means for locking the pivoted nose in coupling position consisting of the vertically-adjustable locking-pin E having a portion provided with a roller e oper-
 70 ating upon the projection D and its shoulders.

5. In a car-coupler, the combination of the
 75 head, with a pivoted nose B having the rear portion C extended as at C' and C^2 and provided with a slot c , a coupler-bar H arranged in the slot and pins I G for holding said bar in position in the slot, and locking means for
 80 locking the nose in coupling position.

6. In a car-coupler, the combination of the head having fixed nose A' and pin-hole F' , with a pivoted nose B having the rear portion
 85 C extended as at C' and C^2 and provided with a slot c , a coupler-bar H arranged in the slot, pins I G for holding said bar in position in the slot, locking means for locking the nose in coupling position, and means for locking the
 90 pivoted nose out of coupling position so as to expose the rear end C' .

7. In a car-coupler, a pivoted nose B having the rear portion C provided with a transverse
 95 slot c and slotted ends C' C^2 also having holes for pins.

8. In a coupler, the combination of the head A having lateral aperture A^5 and fixed nose
 100 A' , combined with the pivoted nose B having slotted rear ends C, C' , C^2 and pins G I for the ends C' C^2 .

9. A car-coupler having a pivoted nose provided with a rear horizontally-slotted portion adapted to receive and inclose a coupler-bar,
 105 combined with means to lock the nose in coupling position, separate means to lock the nose when extended to expose the slotted portion, and a short removable coupler-bar normally carried within upon the rear end of the pivoted nose and adapted to be extended when in use.

In testimony of which invention I hereunto set my hand.

WALTER S. KNEEDLER.

Witnesses:

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