A. SCHOLL.
AUTOMATIC CAR COUPLING.
(No Model.)

2 Sheets—Sheet 2.
To all whom it may concern:

Be it known that I, ANTON SCHOLL, a citizen of the United States, residing at Murray, in the county of Clarke and State of Iowa, have invented a new and useful Automatic Car-Coupling, of which the following is a specification.

My invention is an automatic car-coupling of that class known as the "Janney," in which vertical jaws swing horizontally to interlock. In the use of such couplings when cars are uncoupled it frequently occurs that the jarring incident to the movement of cars causes the jaws to assume closed positions and requires persons to adjust the protruding members to allow two cars to come together to be coupled. To make such adjustment of a jaw by hand is at the risk of personal injury the same as in going between two cars to couple by means of a link and pin.

My object is to prevent jaws of couplers from accidentally assuming closed position and to provide a strong, durable, safe, and efficient automatic coupling that, in addition to all the essential features of a car-coupling, will include an automatic latching device for retaining the jaws in proper position to allow them to interlock when they come together and to assume proper positions for re-coupling whenever they are uncoupled and moved some space apart.

My invention consists in the construction, arrangement, and combination of parts, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my coupling, showing all the operative parts in the positions they assume when coupled. Fig. 2 is a longitudinal sectional view of the draw-head, showing the jaw in an open position and the automatic mechanism that retains it in an open position, as required, to be in readiness to interlock with a mating jaw. Fig. 3 is a horizontal sectional view of the draw-head, showing the jaw retained in an open position and the top end of the device that supports the coupling-pin elevated. Fig. 4 is a front face view of the coupling and the movable parts in the positions they assume when cars are coupled.

The letter A designates the draw-head, and A² the jaw pivotally connected therewith to swing horizontally.

B is a gravitating pin-support pivoted to parallel downward extensions B' at the bottom of the draw-head.

B' is an extension that inclines upward from the pin-support B and is curved at its top portion and adapted to be engaged by the jaw A², as the jaw A² swings inward in closing in such a manner that the extension B' will be depressed, and thereby swing the pin-support B laterally relative to the draw-head, so as to allow the coupling-pin to drop and to engage and lock the jaw in a closed position.

B' is a shoulder at the lower end of the pin-support upon which the coupling-pin can rest.

The coupling-pin C is bifurcated and strides the bolt d, that pivotally connects the pin-support B, as required, to move up and down in the coinciding openings in the top and bottom of the draw-head through which the pin passes. The front face of the lower portion of the pin C is beveled to produce an incline f that allows the inner end of the jaw to pass the pin when the pin is in an elevated position, so that when the jaw is closed and the pin-support actuated thereby, as required, to let the pin drop, the square edge portion of the pin will engage that portion of the inner end of the jaw behind the pin, as required, to securely lock the jaw.

H is a gravitating latch in mating bearers J, formed on or fixed to the inside face of the inner end portion of the jaw A². The latch has a longitudinal slot, and bolts or rivets fixed in the bearers J extend through the slot in such a manner that the latch can move up and down between the bearers. The lower end of the latch H is inclined and adapted to engage the inclined front face of the bottom of the draw-head that serves as a cam for lifting the latch. When the jaw is open, the lower inclined end of the latch will engage the inclined front edge of the lower front edge of the draw-bar, as shown in Fig. 2, and retain the jaw open in such a manner that when the outer end of a mating jaw contacts with the inner and locked end it will press the jaw and the latch inward and allow the jaw to pass inward to actuate the pin-support B, as required, to let the pin C drop behind the extremity of the inner end of the
Having described the purpose, construction, and operation of my invention, its practical utility will be obvious to persons familiar with the art to which it pertains, and what I claim as new, and desire to secure by Letters Patent therefor, is—

1. In a car-coupling, a draw-head having an inclined face on its lower front edge and mouth, a jaw pivoted in said mouth and a straight gravitating latch having an inclined bottom face slidably connected with the inside face of the inner end of the jaw to move in a perpendicular plane, arranged and combined to operate in the manner set forth for the purposes stated.

2. In a car-coupling, a pin-support provided with a shoulder at its lower end adapted to engage the bottom of a coupling-pin and also provided with a laterally-inclined and curved extension at its top adapted to be engaged by the inner end of a jaw, in combination with a draw-head, a jaw pivoted in the draw-head and a coupling-pin fitted in coinciding pin-holes in the top and bottom of the draw-head, to operate in the manner set forth for the purposes stated.

3. An automatic car-coupling comprising a draw-head, a gravitating pin-support pivotally connected with the draw-head and its lower end provided with a shoulder to engage the bottom of a pin and an inclined extension at its top to engage the inner portion of a horizontally-swinging jaw, a coupling-pin extended through coinciding pin-holes in the top and bottom of the draw-head and slidably connected with the pin-support and the lower portion of the coupling-pin bifurcated and the lower portion of its front face beveled, a jaw pivoted in the mouth of the draw-head and a latch having an inclined bottom edge slidably connected with the inside face of the inner end of the jaw to engage the inclined edge of the lower part of the draw-head to retain the jaw open, all arranged and combined to operate in the manner set forth for the purposes stated.

Anton Scholl.

Witnesses:

N. C. Hoffman,

W. B. Murray.