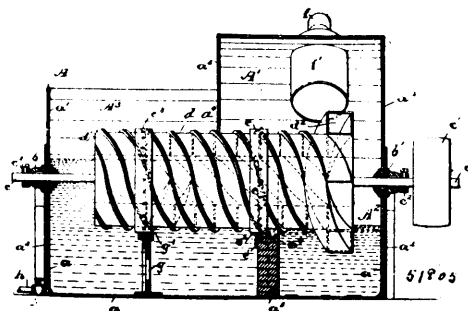


ing a semi-circular bearing-portion made to embrace the sides of said drum, to form a receiving chamber on one side and a discharge chamber on the other side of said wall, a rubber or other like packing ring *c* on said drum fitting into the bearing-portion of said divid-



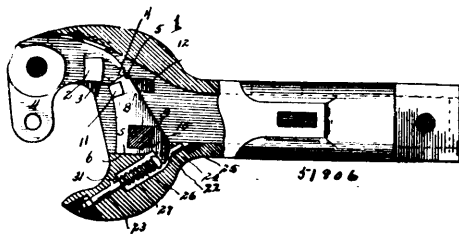
ing wall, and said conveyor drum being adapted to receive water from the receiving chamber and discharging it into the discharge chamber, when in operation, and thereby maintaining a lower level of water in the receiving chamber than that of the water in the discharge chamber, substantially as and for the purpose set forth. 3rd. In an apparatus for condensing smoke, gases or the like, the combination with a tank, and a dividing wall or partition extending from the bottom of the apparatus, of a conveyor drum open at one end and having two or more scoops at its other end, said dividing wall being made to embrace the lower sides of said drum and forming a receiving chamber and a discharge chamber in said tank, said drum during its revolutions, having but one of its scoops submerged at a time in the water in said receiving chamber, and discharging the water into the discharge chamber, and thereby maintaining a lower level of the water in the receiving chamber than that of the water in the discharge chamber, substantially as and for the purpose set forth. 4th. In an apparatus for condensing smoke, gases or the like, the combination with a tank, and a dividing wall or partition having a semi-circular bearing portion, of a conveyor drum rotating in said bearing portion, a rubber or other like packing ring *c* on said drum fitting into said bearing portion of said dividing wall, said dividing wall forming a receiving chamber and a discharge chamber in said tank, a discharge opening in one end of said drum, two or more scoops at the other end of said drum, said drum during its revolutions having but one of its scoops submerged at a time in the water in said receiving chamber, and thereby maintaining a lower level of the water in the receiving chamber than that of the water in the discharge chamber, substantially as and for the purpose set forth. 5th. In an apparatus for condensing smoke, gas or the like, the combination with a tank, of a drum comprising therein, a cylindrical shell and having two or more scoops *d*², a dividing wall *a*⁵ in said tank, extending from the bottom of said apparatus, having a semi-circular bearing portion in said wall, spirally arranged channels within said shell extending longitudinally through said drum, and forming within said shell a cylindrical space between the discharging end and the ends of said channels, substantially as and for the purposes set forth. 6th. In an apparatus for condensing smoke, gases or the like, in combination, a tank having a dividing wall or partition extending from the bottom of said apparatus, and a conveyor drum rotatively arranged in said tank, said dividing wall being made to embrace the lower sides of said drum, to form a receiving chamber on the one side and a discharge chamber on the other side of said wall, said conveyor drum being adapted to receive water from the receiving chamber and discharging it into the discharge chamber when in operation, and thereby maintaining a lower level of the water in the receiving chamber than that of the water in the discharge chamber, and a support *g* in said tank, substantially as and for the purposes set forth. 7th. In an apparatus for condensing smoke, gases or the like, in combination, a tank having a dividing wall or partition having a semi-circular bearing portion made to embrace the sides of said drum to form a receiving chamber on one side and a discharge chamber on the other side of said wall, a rubber or other like packing ring *c* on said drum fitting into the bearing portion of said dividing wall, said conveyor drum being adapted to receive water from the receiving chamber and discharging it into the discharge chamber when in operation, and thereby maintaining a lower level of the water in the receiving chamber than that of the water in the discharge chamber, a support *g* in said tank and a rubber or other flexible band *e*³ on said drum, adapted to rotate on a bearing-portion in said support *g*, all substantially as and for the purposes set forth.

No. 51,806. Car Coupler. (*Attelage de chars*.)

The Moomaw Car Coupler Company, assignee of Henry E. Moomaw, both of Salem, Virginia, U.S.A., 28th March, 1896; 6 years. (Filed 2nd March, 1896.)

Claim.—1st. A car-coupling consisting of a draw-head formed with the square shoulder 6, a coupling-jaw pivoted therein and capable of

a slight lateral movement in addition to its swinging movement, a projection formed on said coupling-jaw, said projection entering a groove formed in the draw-head and abutting against shoulders formed by the walls of the groove, a locking-block formed with the ver-



tical end 5, a pivot pin therefor, said pin being rigidly secured to the locking-block and loosely mounted in the draw-head whereby the locking-block and its pivot pin will have a slight bodily movement in addition to its swinging motion, and means for oscillating the locking-block, substantially as described and for the purpose set forth. 2nd. A car-coupling consisting of a draw-head formed with the shoulder 6, a coupling-jaw pivoted therein, a locking-block formed with the square end 5, a pivot pin therefor, one end of which extends outside of the draw-head, the locking-block being rigidly mounted on the pivot pin, said pin being loosely mounted in the draw-head, whereby the block and pin of the block will have a lateral movement, and the end 5 will be brought against the shoulder 6, and devices carried by the projecting end of the pivot pin for oscillating the locking-block, substantially as described and for the purpose set forth. 3rd. A car-coupling consisting of a draw-head, a coupling-jaw pivoted therein and capable of a slight lateral movement on its pivotal pin, a projection 2 formed on the coupling-jaw and entering a groove 3 in the draw-head, and abutting against shoulders formed by the walls of said groove, a locking-block pivoted in the draw-head and means for oscillating said block substantially as described and for the purpose set forth. 4th. A car-coupling consisting of a draw-head provided with the grooves 12, 13 and 14 and shoulder 32, a coupling-jaw and a locking-block pivoted in said draw-head, vertical projections formed on said locking-block and working in the grooves 12 and adapted to bear on shoulder 32, and to pass through grooves 13 and 14 when desired, substantially as described. 5th. In a car-coupling, a draw-head of the form described provided with a groove 12 and with a groove or channel connecting said groove with the front of the draw-head, a locking-block pivoted in the draw-head and provided with a projection working in the groove 12 and in its normal position abutting against the wall which forms the forward end thereof, and adapted to pass through the groove or channel which connects the groove 12 with the front of the draw-head, and a coupling-jaw, and means for oscillating the locking-block, substantially as described. 6th. A car-coupling consisting of a draw-head, of the form described provided with the groove 12, and shoulder 6, a coupling-jaw and a locking-block pivoted in said draw head, the locking-block being formed with the shoulders 5-5¹ and projections 11 and extensions 22-22¹ a spring working between the extensions 22-22¹ and the shoulder 31 on the draw-head and means for oscillating the locking-block, substantially as described. 7th. A car-coupling consisting of a draw-head, a pivoted coupling-jaw, a pivoted locking-block, the pivot of said block extending above the draw-head, an angle lever secured on the upper end of said pivot, and suitable operating devices connected to said angle lever, for oscillating the locking-block, substantially as described. 8th. A car coupling consisting of a drawhead of the form described provided with the groove 12, and shoulder 6, a coupling-jaw and a locking-block pivoted in said draw-head, the coupling-jaw being formed with the square face 4¹, the locking-block being formed with the shoulders 5, 5¹, and projections 11, said block being capable of a slight lateral movement, means for normally holding the locking-block in its forward position, and means for oscillating the locking-block, substantially as described and for the purpose set forth. 9th. In a car-coupling, the combination of a draw-head, a coupling-jaw pivoted therein, a locking-block pivoted in the mouth of the draw-head, the pivot of said block being tapered downwardly where it passes through the locking-block, said block being formed with a correspondingly tapered hole, a vertical pin passing down through the draw-head and the locking-block, and having its projecting ends provided with corresponding squared portions 17, 20 and corresponding threaded parts at their extremities, an angle lever fitted over one of said squared portions, and adapted to be changed to the corresponding squared portion on the opposite end of the pin, a nut 18 screwed on the threaded portion at one end adapted to be changed to the other end of the pin with the angle lever, a washer 30 on the pin below the draw-head, and a removable pin 28 below the washer, substantially as described and for the purposes set forth.