

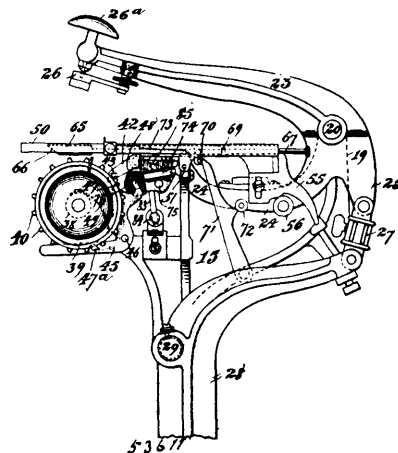
nation with the draw-head having a guard-arm, of the horizontally swinging knuckle pivoted on the draw-head, a guard-lever pivoted on the draw-head in the rear of the knuckle and having an arm interposed between said knuckle and the entering of the similar knuckle of the opposite draw-head and actuated by said end, said lever also having an arm engaging the first knuckle so as to throw it inward, and independent means for actuating said lever, substantially as described. 13th. In a car-coupling, the combination with the draw-head having a guard-arm, of the horizontally swinging U-shaped knuckle pivoted, through its rear arm, upon the draw-head, its bend receiving the nose of the opposite similar knuckle, and mechanism for swinging said knuckle inward arranged to be actuated by the transverse inward movement of the opposite knuckle, substantially as described. 14th. In a car-coupling, the combination with the draw-head having a guard-arm, of the horizontally swinging U-shaped knuckle pivoted, through its rear arm, upon the draw-head, its bend receiving the nose of the opposite similar knuckle, mechanism for swinging said knuckle inward arranged to be actuated by the transverse inward movement of the opposite knuckle, and a spring for so swinging said knuckle, substantially as described. 15th. In a car-coupling, the combination with the draw head, of the horizontally swinging U-shaped knuckle the rear arm, of which engages the draw-head to transmit the pull thereto through said rear arm, and ejector mechanism, actuated by the outward movement of said knuckle, for moving the other knuckle outward, substantially as described. 16th. In a car-coupling, the combination with the draw-head, of the horizontally swinging U-shaped knuckle the rear arm of which engages the draw-head to transmit the pull thereto through said rear arm, and a lever actuated by the outward movement of the knuckle, and engaging the end of the opposite knuckle to eject it from the draw head, substantially as described. 17th. In a car-coupling, the combination with the draw-head, of the horizontally swinging U-shaped knuckle pivoted through its rear arm upon the draw-head, and an arm swinging on the draw-head extending across the rear arm of the knuckle and having in its end a recess to receive a pin for a link-and-pin coupling, said recess being open on the side next the knuckle whereby the stress upon the pin is borne by said knuckle, substantially as described. 18th. In a car coupling, the combination with the draw-head and a horizontally swinging knuckle pivoted thereon, said knuckle being slotted to permit the passage therethrough of a link, of a pin-support movable relatively to the knuckle, said knuckle being recessed to receive the pin-support when not in use, substantially as described. 19th. In a car-coupling, the combination with the draw-head and a horizontally swinging knuckle pivoted thereon, said knuckle being slotted to permit the passage therethrough of a link, of a pin-support movable relatively to the knuckle, and when in position to receive the pin permitting the pin to bear against the rear of the knuckle, said knuckle being recessed to receive the pin-support when not in use, substantially as described. 20th. In a car-coupling, the combination with the draw-head and a horizontally swinging knuckle pivoted thereon, said knuckle being slotted to permit the passage of a link, of a pin-support movable relatively to the knuckle, and when in position to receive the pin permitting the pin to bear against the rear of the knuckle, said knuckle being recessed to receive the pin-support when not in use, substantially as described. 21st. In a car-coupling, the combination with the draw-head, of the horizontally swinging knuckle pivoted on the draw-head, a guard-lever interposed between said knuckle and the entering end of the similar knuckle of the opposite draw-head and actuated by the latter knuckle to close the other, said lever being provided with a recess to form a pin-hole for a link-and-pin coupling, substantially as described. 22nd. In a car-coupling, the combination with the draw-head, of a horizontally swinging knuckle pivoted therein, and means for yieldingly holding said knuckle in its closed position, substantially as described. 23rd. In a car-coupling, the combination with the draw-head, the knuckle 4 pivoted thereon, and the guard-lever 9 also pivoted on the draw-head, said knuckle and lever having opposite vibratory movements, substantially as described. 24th. In a car-coupling, the combination with the draw-head, the knuckle 4 pivoted thereon, the guard-lever 9 also pivoted on the draw-head, said knuckle and lever having opposite vibratory movements, and the spring 18 actuating said lever and knuckle, substantially as described. 25th. In a car coupling, the combination with the draw-head, the knuckle 4 having the forked arm whereby it is pivoted on the draw head, and the guard-lever 9 passing through said fork, as and for the purpose set forth. 26th. In a car-coupling, the combination of the draw-head, the knuckle 4 having the forked arm whereby it is pivoted on the draw-head, the guard-lever 9 passing through said fork, and the spring 18 actuating said lever and knuckle, substantially as described.

### No. 53,611. Addressing Machine. (*Machine à adresser.*)

The Addressograph Company, assignee of Joseph Smith Duncan, both of Chicago, Illinois, U.S.A., 28th September, 1896; 6 years. (Filed 14th August, 1896.)

*Claim.*—1st. In addressing machines, an endless type belt composed of hinged link plates having printing surfaces suspended upon a single drum or pulley having a step-by-step revolution, and adapted by said revolution to bring the type surfaces successively into position for printing, substantially as set forth and for the purposes specified. 2nd. In machines for printing a predetermined list

of addresses or other forms, an endless type belt suspended by its own weight over a single drum or pulley and provided with hinged



link plates with stamping or printing surfaces, a platen capable when properly actuated of forcing the surface to be printed into contact with the stamping or printing surfaces, and mechanism for imparting to the drum or pulley and the type belt a step-by-step revolution and bringing the link plates successively into co-operation with the platen, all substantially as above set forth and for the purposes specified. 3rd. In an addressing machine, the combination with a rotatable drum, an endless type belt suspended thereon, a pivoted arm carrying a platen, a pivoted operating lever adapted to be oscillated by the foot of the operator and a link connecting said lever and said arm, said link and said lever constituting a toggle which is straightened by the oscillation of the lever in making an impression, substantially as described. 4th. In an addressing machine, a rotatable drum, an endless type belt suspended thereon, a pivoted arm carrying a platen, a driving pawl actuated by said arm for rotating the drum, an operating lever pivoted between its ends and adapted to be oscillated on its pivot by the foot of the operator, said lever extended rearwardly from its pivot and a relatively short link connecting the rear end of the platen carrying arm with the rearwardly extended end of the operating lever, said link and said extended end of the lever constituting a toggle which is straightened by the oscillation of the arm, substantially as and for the purpose described. 5th. In an addressing machine, the combination with a revolvable drum adapted to support an endless type belt, a pivoted arm carrying a platen, a pivoted operating lever having its upper end extended rearwardly from its pivot, and an adjustable link connecting said rearward extension and the platen carrying arm, substantially as described. 6th. In an addressing machine, the combination with a revolvable drum, of an endless type belt mounted thereon, a stationary ink reservoir and a transferring pad carried by a pivoted frame, a rock shaft having a crank thereon and a stud on which the said frame is pivoted and means for rocking said shaft upon its pivot, whereby to move said transfer pad out of contact with the supply and into contact with the printing face on the type belt, substantially as described. 7th. In an addressing machine, the combination with a revolvable drum, of an endless type belt suspended thereon, a pivoted arm having a platen, said arm having a rigid extension, a driving pawl pivoted to said extension, an ink-transferring pad mounted in a rocking frame, a rock shaft having a crank and a stud on which said rocking frame is mounted and a roller bearing on said crank arm, whereby the depression of the platen effects the application of ink to the type-belt, and the rotation of the drum one step, substantially as described. 8th. In an addressing machine, the combination with a revolvable drum carrying an endless type-belt, of a driving pawl for advancing said drum step by step, said pawl having a lateral projection or dog and ratchet discs rotatably mounted adjacent to said pawl and having dissimilar teeth, said ratchet discs being movable so as to bring the one or the other into operative position with reference to the pawl, substantially as and for the purpose described. 9th. In an addressing machine, the combination with a revolvable drum carrying an endless type-belt, a pivoted printing arm carrying a platen, a pivoted plate to support the material which is to receive the impression, a sliding ink pad mounted in ways on said pivoted plate, a rocking lever adapted to bear up said pad, whereby to move it into position above the printing form and actuated by the printing arm and a spring to retract the said pad, substantially as described. 10th. A type-belt for addressing machines, composed of a series of detachable link plates articulated together and adapted to hold or provide with printing surfaces, substantially as described. 11th. A link plate for an endless type-belt composed of a single sheet of metal having upturned margins, one of which is curved to provide recessed sides and with transverse notches, and the other margin