

coin-operated liquid-vending apparatus, the combination of an oscillatory vessel or tipper, a supply-pipe leading from a suitable reservoir or tank, and having an automatic valve, a float operating in said vessel and connected to the valve, a water-chamber arranged to deliver a predetermined quantity to said vessel, and a water-supply pipe leading to the water-chamber, substantially as and for the purpose described. 11th. In a coin-operated liquid-vending apparatus, the combination of an oscillatory vessel or tipper, a water-chamber having an independent supply-pipe, and arranged to deliver its contents to said vessel, a supply pipe leading from a beverage tank and having an automatic valve, a float operating in the vessel and connected to said valve, a lever controlled by the float and having a coin-detaining plate at one end, an elevated chamber intermediate the beverage tank, and its supply pipe, and a float in said chamber having a rod which connects with the lever, all arranged and combined for service, substantially as described, for the purpose set forth.

No. 34,967. Coin-Operated Liquid-Vending Apparatus. (*Appareil actionné par une pièce de monnaie pour la vente des liquides.*)

Henri Schloesing and Benjamin Degremont, Marseilles, France, 3rd September, 1890; 5 years.

Claim.—1st. In a coin-controlled liquid-vending apparatus, the combination of a delivery pressure-cylinder, a valve-chest communicating with said cylinder, and having an automatic valve, a coin-controlled lever connected with said valve to automatically open the latter and permit the liquid from the pressure cylinder to escape through the valve chest, and mechanism for closing said valve when the pressure cylinder is emptied, all arranged and combined for service, substantially as and for the purpose specified. 2nd. In a coin-controlled liquid-vending apparatus, the combination of a pressure cylinder having a piston, a valve-chest communicating with said cylinder, a coin-operated lever arranged in the path of the coin deposited in the machine, a valve located in said valve-chest, and connected with said coin-operated lever to be maintained thereby in a normally-closed position, and mechanism connected to said valve and arranged to be operated by the piston to close the valve when the pressure-cylinder is emptied, substantially as and for the purpose described. 3rd. In a coin-controlled liquid-vending apparatus, a pressure cylinder having an outlet at or near its lower portion, and a piston operating in said cylinder and provided with an inlet port and a piston rod, the area of exposed surface on the upper side of the piston being less than the exposed area on the lower side thereof, for the purpose described, in combination with a valve-chest which communicates with the outlet of said pressure-cylinder, a valve, and a coin-operated lever connected to said valve, all arranged and combined for service, substantially as described. 4th. In a coin-controlled liquid-vending apparatus, a pressure cylinder, a reciprocating piston operating therein, and an adjusting screw arranged to limit and vary the stroke of said piston to regulate the capacity of the cylinder for holding liquids, in combination with a valve-chest communicating with the cylinder and having an automatic valve, and a coin-operated lever for operating the valve, substantially as described. 5th. In a coin-controlled liquid-vending apparatus, the combination of a pressure cylinder, a valve-chest communicating with said cylinder, an automatic valve housed within said valve-chest, a coin-operated lever having a trip-pawl, and a lever connected to said valve and normally supported by said trip-pawl, all arranged for service, substantially as described, for the purpose set forth. 6th. In a coin-controlled liquid-vending apparatus, the combination, with a pressure-cylinder, and a valve-chest having a valve, of a coin-tube, a lever arranged in the path of the coin that passes through said coin-tube, and another lever connected to the valve and normally sustained by the coin-operated lever in an elevated position to close the valve, substantially as and for the purpose described. 7th. In a coin-controlled liquid-vending apparatus, the combination, with a pressure cylinder and a valve, of a lever connected to said valve, a coin-operated lever for sustaining the valve-lever in an elevated position, and a lever operated by the piston of the pressure-cylinder, to raise the valve-lever after it has been released by the coin-operated lever, substantially as and for the purpose described. 8th. In a coin-controlled liquid-vending apparatus, the combination, with a pressure-cylinder and an automatic valve, of a coin-operated lever having a trip-pawl, a lever connected at one end to said valve and resting at its other end on the trip-pawl, and a lever fulcrumed on the pressure-cylinder to be operated by the piston thereof and having its free end arranged to lift the valve-lever, whereby, when said valve-lever is lowered after its disengagement with the coin-operated lever to open said valve, the descent of the piston actuates the piston-lever to elevate the valve-lever and cause it to re-engage with the trip-pawl, substantially as described. 9th. In a coin-controlled liquid-vending apparatus, a valve-chest having a valve-seat and the aligned guides, a vertically movable valve-stem fitted in said guides and carrying a valve, and a rock-shaft having an arm at one end on which the lower end of the valve-stem rests, in combination with a lever fixed to the extended end of said rock-shaft, a coin-operated lever for normally elevating the valve-lever, and a pressure cylinder, substantially as described. 10th. In a coin-controlled liquid-vending apparatus, the combination of a vertical coin-tube having a slot, a counterbalanced lever fulcrumed on an axis *C*, and having its free end fitted in the slot of the coin-tube, a trip-pawl carried by said lever, a valve-lever normally fitted on said pawl, an automatic valve controlled by said valve-lever, a pressure cylinder, and a bifurcated lever fulcrumed on the pressure cylinder, with one end arranged in the path of a protuberance on the piston of the cylinder, and having its other end arranged to lift the valve-lever, substantially as and for the purpose described. 11th. A coin receiver having a longitudinal coin passage, and a transverse opening which extends through one side, and the lower edge of said coin passage, combined with a counterbalanced plate arranged in said transverse opening at the base of the coin passage, and forming a continuation of the bottom of the coin passage, to sustain a coin of proper denomination as it passes across said opening, substantially as described. 12th. In a coin-operated

liquid vending apparatus, a fixed coin receiver having a longitudinal coin passage, and a series of transverse openings which intersect said longitudinal passage, and extend through one side, and the bottom of the coin passage, combined with a counterbalanced plate fitted in each of said transverse openings at the base of the coin passage, and forming a continuation of the bottom thereof, a series of levers, each of which carries one of the plates, and a common fixed support on which all the levers of the series are fulcrumed, substantially as described. 13th. In a coin-operated liquid-vending apparatus, the combination, with a coin receiver and counterbalanced plate, of a float-receptacle which communicates with the source of liquid supply for the vending apparatus, and a float connected by intermediate devices with said counterbalanced plate to hold the latter against movement under the weight of a coin, substantially as and for the purpose described. 14th. In a coin-operated liquid-vending apparatus, the combination, with a coin receiver of a plate carried by a counter-balanced lever, a float-receptacle having a rock-shaft journaled in one end thereof, a float, an arm carried by the rock-shaft and jointed to the float, and a lever intermediate of the rock-shaft and the counterbalanced lever, substantially as described.

No. 34,968. Variable Hose Nozzle.

(*Lance de tuyau en caoutchouc, variable.*)

Charles Wright Pearsall, Syracuse, N.Y., U.S.A., 3rd September, 1890; 5 years.

Claim.—1st. A hose nozzle body, provided with a variable or circum-rotary discharge mouth-piece, comprising, forwardly, a tubular discharge stem, and, rearwardly, a hemispherical, or cup-shaped, shell portion, that is adapted through the direct forward pressure of fluid against its interior concave surface, to move longitudinally forward against and in direct contact with the circum-adjacent forward body portion, creating an air and water-tight joint or union thereat, devoid of packing, and adapted through the cessation of the fluid pressure against its inner concave surface, to recede out of direct contact with the forward circum-adjacent body portion, all constructed and operating together, substantially as described. 2nd. A variable hose-nozzle, consisting of a main or body portion, comprising the tubular stem, threaded at its rear extremity, and terminating forwardly in a substantially hemispherical shell portion integral with said stem, and threaded at its forward extremity, and an hemisphero segmental retaining ring threaded at its rear end, and screwed to the forward threaded extremity of the hemispherical shell portion of the nozzle-body, an hemispherical shell portion lying movably within the semi-globular chamber, created by the attachment together of the hemispherical shell portion and detachable hemisphero retaining ring of the nozzle body portion, and adapted to forward, rearward, and circum-rotary movement therein, the said portion terminating forwardly in a tubular stem integral therewith, and conjointly forming a variable nozzle mouth piece, and provided at its forward extremity with a discharge mouth or orifice, all said parts being combined and operating together, substantially as hereinafter specified. 3rd. In a variable hose nozzle, the main or body portion A, comprising the tubular stem *b*, having the internally-threaded tubular head portion *a*, rearwardly, said stem *b*, terminating forwardly in a hemispherical shell portion *c*, integral therewith, and externally threaded at its front portion, a hemisphero-segmental retaining ring B, of convergent form forwardly, internally-threaded and detachably secured to the hemispherical shell portion *c*, at its threaded extremity, an hemispherical shell or cup portion *d* disposed movably within the semi-globular chamber of the body portion A, both longitudinally and circum-rotary, and terminating forwardly and centrally in an elongated tubular discharge stem *i*, formed integral therewith, and provided with a contracted nozzle discharge mouth or orifice K, at its forward portion, the hemispherical shell *h*, of the nozzle mouth piece C, decreasing in thickness rearwardly toward the shell's circumferential edge, as at *o*, and creating a thin edge thereat for the purpose specified, all constructed, combined, and operating in union together, substantially as described and shown. 4th. In a variable hose nozzle, the combination of the main portion A, comprising the threaded tubular head *a*, integral tubular stem *b*, integral hemispherical shell *c*, circumferentially threaded forwardly, and detachable threaded retaining ring B, having the forward converging circumferential rim *g*, with the variable mouth-piece C, comprising a hemispherical or cup-shaped portion *h*, movably seated within the chamber created by the union of the parts *c* and B, said cup portion *h* having walls decreasing in thickness rearwardly to or at its circumferential edge, as at *o*, and integrally connected with a tubular discharge stem *i*, provided at its forward extremity with a detachable discharge tip D, having a contracted discharge mouth or orifice K, said tip being secured by its threaded part to the threaded end of the stem *i*, of the mouth-piece C, substantially as described. 5th. The combination, with the discharge mouth-piece C, movably seated within the chamber of the nozzle body by its cup-shaped portion *h*, of the flat tip extension E, constructed as shown, having the elongated rectangular or flat discharge orifice *e*, and detachably connected to the tubular stem *i*, of the mouth-piece C, by the integral annular portion D, substantially as described and for the purposes specified.

No. 34,969. Car Coupling. (*Attelage de chars.*)

John M. Burden, Huntsville, Ky., U.S.A., 4th September, 1890; 5 years.

Claim.—1st. In a car coupling, a draw-head, comprising a body or main section B, having a flared forward end, provided in its upper side with a recess B', and having a groove B'', extending between the said recess B' and the flared forward end, and the spring-actuated section C, hinged to section B, having a flared forward end and provided in its under side with a recess C', and having a groove C'' extending from recess C', forward to the front flared portion, all substantially as and for the purposes set forth. 2nd. The combination, of the body or main section, the section C, the shaft F, having a bevel-gear F', a connection between shaft F and section C, and the shaft G, having a