

tive position to rest within the mouth of a mould, substantially as described. 14th. In a casting apparatus, the combination with a mould carrier having mould supporting brackets mounted thereon, and means for rotating it in a horizontal plane, of a fixed platform mounted centrally of said carrier and controlling mechanism for governing the movement of the carrier located on said platform, substantially as described. 15th. In a casting apparatus, the combination of the horizontally rotatable mould carrier, a central fixed shaft or support about which said carrier rotates, a fixed platform supported by said shaft and forming a stable base for the operator, substantially as described. 16th. In a casting apparatus, the combination of the mould carrier and means for rotating it in a horizontal plane, a central fixed shaft or support about which said carrier rotates and a fixed platform supported by said shaft with carrier controlling mechanism mounted on said platform, substantially as described. 17th. In a casting apparatus, the combination with the horizontally rotatable carrier having the mould brackets mounted thereon, of a central shaft about which said carrier rotates, projecting up through the carrier, a horizontal platform mounted on the upper end of said shaft and fixed with relation to the carrier, a driving mechanism mounted on said platform, gearing interposed between said driving mechanism and carrier and a controlling handle for said driving mechanism, substantially as described. 18th. In a casting apparatus, the combination with the horizontally rotatable carrier, having mould supporting brackets projecting therefrom and a central shaft about which said carrier rotates projecting up through the carrier, of a platform supported on said shaft above said carrier, a hydraulic cylinder mounted on the platform, a piston working in said cylinder, a shaft rotated by the movement of the piston and gearing interposed between said shaft and carrier, as set forth. 19th. In a casting apparatus, the combination with a horizontally rotatable carrier, of a driving mechanism for rotating said carrier embodying a hydraulic cylinder and piston, a shaft, connections between said piston and shaft whereby the latter is rotated, with a ratchet interposed in said connections for preventing reverse movement of the shaft and gearing interposed between the shaft and carrier, substantially as described. 20th. In a casting machine, the combination with a horizontally rotatable carrier, having mould supporting brackets projecting therefrom, of a driving mechanism for rotating said carrier embodying a hydraulic reciprocating motor, a drum, connections between the motor and drum whereby the latter is rotated in one direction by the motor, a weight connected with the drum for rotating it in the opposite direction, a shaft gearing with the carrier and a pawl and ratchet connection interposed between the drum and shaft, substantially as described. 21st. In a casting machine, the combination with a horizontally rotatable carrier, a series of pivoted dumping moulds mounted on and entirely supported thereby with controlling arms for said moulds, of inclines with which said arms co-operate as the carrier rotates to invert said moulds and discharge the castings, substantially as described. 22nd. In a casting apparatus, the combination with a horizontally rotatable carrier, having a series of mould supporting brackets projecting therefrom, dumping moulds pivoted on horizontal axes, tangential to the carrier, in said supporting brackets and entirely supported thereby and controlling arms for said moulds, of an incline located in the path of travel of said controlling arms, whereby the moulds are inverted to discharge the castings, and a reverse incline also located in the path of travel of said controlling arms for returning the moulds to their initial position, substantially as described. 23rd. In a casting apparatus, the combination with the horizontally rotatable carrier, the mould supporting brackets carried thereby, the moulds journaled in said arms on horizontal axes and controlling arms for said moulds of an incline lying in the path of travel of said controlling arms for inverting the moulds, a second incline with which said arms co-operate, and down which they travel as the moulds become inverted and a reverse incline lying in the path of travel of said arms when the moulds are in their inverted position for returning the moulds to their initial position, substantially as described. 24th. In a casting apparatus, the combination with a horizontally rotatable carrier and moulds journaled thereon on horizontal axes located eccentrically of said moulds whereby when the moulds are inverted they will extend into a lower plane than when in initial position, of a water bosh having its side walls extending above the level of the lower portion of the inverted mould but below the level of the mould when in initial position, whereby said mould may be inverted so as to pass through the water contained in the bosh and be cooled thereby, substantially as described. 25th. In a casting apparatus, the combination with the horizontally rotatable carrier having the mould supporting brackets projecting therefrom and moulds journaled in said brackets on axes arranged eccentrically to the moulds whereby when the moulds are inverted they will extend into a lower plane than when in normal position, of a water bosh having its side walls extending into a plane above the level of the lower portion of the inverted mould and below the level of the plane of the mould when in normal or initial position, of mechanism arranged above said water bosh for automatically inverting and returning the moulds to initial position, substantially as described. 26th. In a casting apparatus, the combination with a horizontally rotatable carrier and a series of moulds supported thereby, of a central stationary platform arranged within said carrier, a pouring ladle for supplying molten metal and a universally movable deflector interposed between said ladle and moulds, with a

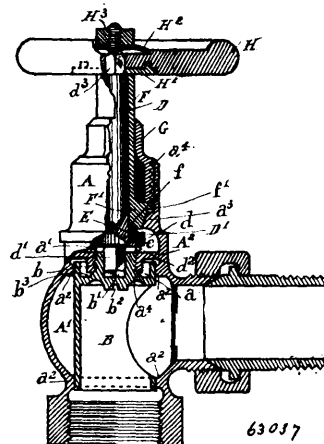
support for said deflector carried by the central fixed platform, substantially as described. 27th. In a casting apparatus, the combination with the horizontally rotatable carrier, a series of moulds supported thereby, a pouring ladle for supplying molten metal to said mould and a fixed support or platform, of a substantially horizontal shaft mounted in bearings on said platform to rotate and move longitudinally, a deflector carried by said shaft and adapted to be interposed between the ladle and mould, and a controlling handle and counterweight also carried by said shaft for manipulating the deflector, substantially as described. 28th. In a casting apparatus, the combination with the horizontally rotatable carrier, the series of moulds supported thereby, a pouring ladle for supplying molten material to the mould and a fixed platform, of a substantially horizontal deflector supporting shaft mounted in bearings on said platform so as to be capable of a rotary and a longitudinal movement, a vertically adjustable deflector arm carried by one end of said shaft with a deflector connected with said arm and adapted to be interposed between the ladle and moulds, and a controlling handle and counterweight carried by the opposite end of said horizontal shaft, substantially as described. 29th. A mould for use in casting apparatus consisting of a frame having a recess therein and an independent insert containing the mould cavity keyed in the recess in the frame, substantially as described. 30th. A mould for use in casting apparatus consisting of an iron frame having a recess therein and a copper insert keyed in said recess and having the mould cavity in its upper surface, substantially as described.

No. 63,036. Process of Manufacturing Pumpkin Flour and Squash Flour. (*Procédé pour la fabrication de farine de citrouille etc.*)

Lydia McClatchey, Leamington, Ontario, Canada, 9th May, 1899; 6 years. (Filed 26th September 1898.)

Claim.—The process of making pumpkin flour and squash flour by cutting the solid portions of these vegetables into pieces removing the moisture therefrom by evaporation permitting the pieces to sweat and then become dry kiln, drying the pieces until they are free from moisture and grinding the pieces into flour, substantially as described.

No. 63,037. Valve. (*Soupepe.*)



John N. Murphy, Springfield, Illinois, U.S.A., 9th May, 1899; 6 years. (Filed 27th January, 1898.)

Claim.—1st. A valve body having a globular part provided with internal annular projections and an integral cylindrical part having an internal annulus, also having a diaphragm being provided with an annulus having an inclined seat at its lower end, in combination with an internal gate having a screw fitting in the annulus on said diaphragm and having at the base of said screw a conical surface seating on the inclined surface of said annulus, also having a socket in said screw, a valve stem provided with a packing ring plate and having a squared end fitting in said socket, a packing ring connected with said packing ring plate, a union sleeve inclosing said valve stem and having in its end a conical cavity on which said packing-ring seats, said union sleeve being also adapted to seat on the annulus within the cylindrical part of the valve body, a nut screwing in the valve top and bearing on said union sleeve, and a hand wheel connected with said valve stem, the upper end of said union sleeve abutting against the under side of said hand wheel, as set forth. 2nd. In a valve, a valve-stem provided with a packing ring plate and having its upper and lower ends squared, also having its upper end screw threaded, in combination with a packing ring, a screw ring connecting said packing ring with said packing ring plate, a union sleeve seating on an annulus within the valve body and having in its lower end a conical recess in which said packing seats, a hand wheel, a plate connected with said hand wheel and fitting on the upper squared part of the valve stem, a dished washer