

carrier therefor, whereby the inclination of the bank is changed and the finger is caused to touch the edge face of each sheet, and carry and bend the sheet, substantially as specified. 10th. In combination, with a finger and carrier therefor, a table so located as to present an edge face of a sheet to said finger, said table being provided with a raised portion or block O, to form or maintain a bend or curve in the bank of paper, substantially as specified. 11th. The combination, with a finger and carrier therefor, of a table so located as to present an edge face of a sheet to said finger, said table being provided with a raised portion or block O, for supporting a curved bank, and with a bracket or gage L, substantially as and for the purposes specified. 12th. The combination, of a cylinder E, bearing a finger F, pivoted table D, for supporting and moving the bank, a chain or rope m, a shaft h, bearing a drum i, on which said chain or rope winds, and a worm k, and gear j, substantially as described. 13th. In a paper-feeding machine, a table D, provided with a raised part to support the bank of paper at or near the end, and with a bracket L, whereby the bank is maintained in a bent or curved form, the upper sheet prevented from sliding under the action of a finger pressing against its edge face, and so that an edge of each sheet projects or extends beyond the corresponding edge of the adjacent sheet, substantially as set forth. 14th. In a paper-feeding machine, a movable instrument herein called a finger, in combination with a support or table for a bank of paper located with reference to said instrument so as to present an edge of a sheet of said bank to the same, substantially as and for the purpose set forth. 15th. In combination, with an instrument herein called a finger, a support located with reference to said instrument so as to present the edge face of a sheet of paper to the same, said instrument being automatically adjustable (in position) with reference to said edge face, and movable transversely with reference to the edge of said sheet, whereby it will touch said edge face and carry and bend the sheet, substantially as specified. 17th. In combination, with an instrument herein called a finger, a support located with reference to said instrument so as to present an edge face of a sheet to the same, said instrument being movable, its movement being variable, whereby it will engage with said edge face and while in contact therewith have a comparatively slow motion, substantially as set forth.

No. 35,713. Panel for Burial Caskets.

(*Panneau de cercueil.*)

John Danford Ripsom, Thorold, Ontario, Canada, 7th January, 1891; 5 years.

Claim.—1st. In combination, the casket, the lid C, and a shrine panel plate b, of about the size of the head opening, and adapted to support various articles, said plate being embedded in the lid and held in horizontal position whether slid out or in by its edge engaging with the lid above it, substantially as described. 2nd. In combination, the casket, the lid C, having a grooved under side, the shrine panel arranged in the groove and in engagement with the lid above it, whereby it is sustained in horizontal position when slid out, and means for limiting the movement of the panel consisting of the stops E, projecting horizontally outward from the rear of the panel, and the stops f, projecting horizontally inward from the edge of the groove, substantially as described. 3rd. In combination, the casket, the lid, a shrine panel consisting of the two plates hinged together, the said lid having a groove under it to admit both of the hinged plates, the plate b, being adapted to receive and hold articles, and held in a horizontal position whether out or in by its edges engaging the groove, and the plate a, being adapted to rest on a projection h, when swung down. 4th. In combination, the casket, the lid, the head panel A, and the foot panel B, sliding beneath the lid, the said panel A, having extensions on its rear edge, and the panel B, having notches to receive said extensions, substantially as described. 5th. In combination, the casket, the lid, the channel extending beneath the lid from end to end, the shrine panel A, at the head sliding in said groove, the shrine panel B, at the foot flush with the shrine panel A, and also sliding in said groove, the inner edges of said panels shutting against each other when they are closed, substantially as described. 6th. In combination, the casket, and lid, the shrine panel consisting of the two parts a, and b, hinged together, the cloth covering therefor, and the elastic straps I, connecting the edges of the cover, substantially as described. 7th. The sunken head shrine panel A, sliding outwardly in the grooves H, through the slot u, and provided with catch F, to engage with the stop f, in combination with the sunken foot shrine panel provided with catches G, to engage with the stops g, and sliding outwardly in the same groove through the slot f, the two panels being exactly flush, and when closed are designed to abut against each other, substantially as and for the purpose set forth.

No. 35,714. Burner for Gas and Hydro-Carbons.

(*Foyer à gaz et à hydrocarbures.*)

George Roberts, Montreal, Quebec, and John Hally, Toronto, Ontario, both of Canada, 7th January, 1891; 5 years.

Claim.—1st. The combination, in a burner for gas, gasoline, or hydro-carbon vapour, of the casing a, having damper or dampers e', and openings e, section or sections i, perforated diaphragm c, with a casing f, having corresponding sections h, each provided with a pipe o, having perforations r, and each provided with openings l, downward extending ridges m, having perforations n, the whole constructed and arranged, substantially as shown and described. 2nd. The combination, in a burner for gas, gasoline, or hydro-carbon vapour, of the casing a, having damper or dampers e', and openings e, section or sections i, perforated diaphragm c, with a casing f, having corresponding sections h, each provided with a pipe o, having

perforations r, and each provided with opening l, downward extending ridges m, having perforations n, with a branch pipe g, having adjustable opening t, for the admission of air, the whole constructed and arranged to operate, substantially as shown and described for the purposes set forth.

No. 35,715. Governor for Air Pumps.

(*Régulateur pour pompes à air.*)

Craven Robert Ord, West Toronto Junction, Ontario, Canada, 8th January, 1891; 5 years.

Claim.—1st. In an air pump governor, the combination, with a passage way provided with a partition having a port therein and a cylinder opening into the outlet, of a main valve fitted to slide freely, but not steam tight, in the said cylinder, and adapted to close the said port, the portion of the valve which closes the port being of less cross sectional area than the part fitting in the cylinder, a spring acting on said valve to retain a greater pressure on the inlet than on the outlet side, and an auxiliary valve operated by air pressure and controlling the admission of steam to the first named valve, substantially as described. 2nd. In an air pump governor, the combination, with a passage way provided with a partition having a port therein, and a cylinder opening into the outlet and communicating through ports with the inlet, of a main valve fitted to slide freely, but not steam tight, in the cylinder, and having its lower end which closes the port of less cross sectional area than the part fitting in the cylinder, a spring acting upon the upper end of the valve, and an auxiliary valve for closing the ports leading to the said cylinder, said auxiliary valve being operated by air pressure, substantially as herein shown and described. 3rd. In an air pump governor, the combination, with a passage way divided by a partition having a port therein, a cylinder above the port and opening into the outlet side of the passage way, and a second cylinder of less diameter than the first named cylinder and communicating therewith, and with the inlet of the passage way, of a spring pressed valve in the first named cylinder, and adapted to close the port of the passage way, an auxiliary valve in the second named cylinder and adapted to establish and close communication between the inlet of the passage way and the cylinder containing the spring pressed valve through the cylinder, of the auxiliary valve, and a diaphragm adapted to be acted upon by air pressure to operate the auxiliary valve, substantially as herein shown and described. 4th. In an air pump regulator, the combination, with the spring pressed stem O, provided with the diaphragm P, adapted to be acted upon by air pressure, of a passage way divided by a partition having a port therein, the cylinder G, above the port and opening into the outlet of the passage way, the spring pressed valve F, F', in the cylinder, the cylinder J, above the cylinder G, and connected by port a, with the inlet of the passage way, and provided with a valve seat, the cylinder L, connected by port b, with the cylinder G, and the auxiliary valve K, provided with the stem K', having the reduced portion K', and adapted to be engaged by the lower end of the stem O, substantially as herein shown and described.

No. 35,716. Machine for Dyeing, Bleaching and Treating Yarn in Compact Form.

(*Machine pour teindre, blanchir et traiter le fil de caret en forme compacte.*)

August Graemiger, Cheetham, Manchester, and William Thomas Whitehead, Rodcliffe, both of England, 8th January, 1891; 5 years.

Claim.—1st. In machines for dyeing, bleaching, and otherwise treating yarn in cop or other compact form, a rotary cop carrier consisting of two discs b, b', formed respectively with four groups of cop tube holes or nipples e', e'', e''', e'', in combination with a stationary central carrier body c, hermetically fitted between the carrier discs b, b', and formed with a preliminary liquor or air exhaustion chamber h, primary liquor extraction chamber h', saturation and impregnation chambers h'', and h''', and liquor extraction chamber h'', respectively adapted to subject each circular row of cops on the cop carrier b, b', being rotated to air exhaustion, and after each intermittent rotation thereof, simultaneously two cop groups to primary liquor extraction four groups to saturation and impregnation and two groups to liquor extraction, substantially as set forth. 2nd. The combination, with the preliminary air exhaustion chamber h, having ports n, and the automatically operated vacuum valve n', of an air and liquor separator in which the air charged with liquor strikes against a perforated division plate q', which causes the air to ascend, and the liquor to descend into the cylinder or casing o, furnished with an air valve o', and liquor valve o'', operated at suitable intervals by the rotary cop carrier b, b', whereby the liquor is returned into the tank a, free of air, substantially as and for the purpose set forth. 3rd. The clutch lever r, furnished with a projection r', actuated at suitable intervals by the rotary cop carrier b, b', and adapted to engage the clutch lever r, and thereby automatically close the vacuum valve n', and effect the intermittent rotation of the cop carrier b, b', all substantially as set forth. 4th. The rotary cop carrier b, furnished with cams p, in combination with a liquor charging vessel u, furnished with a two way tap n'', operated at suitable intervals by the rotary cop carrier b, b' and adapted to alternately receive and supply a given quantity of liquor to the tank a, substantially as and for the purpose set forth. 5th. In a machine for dyeing, bleaching, and otherwise treating yarn in cop or other compact form with cylindrical cop carrier, the cop carrier b, formed with cop tube hole or nipple rows g', all round its periphery and with a separate cavity w, for each row, in combination with a carrier body c, employed stationary on the axis d, hermetically against the end of the cop carrier b, which on being rotated successively brings the mouth of the cavities w, in communication with segmental chambers h, h'', h'', formed in the face of carrier body c, respectively adapted to subject the cop rows g', to preliminary or air exhaustion saturation, and impregnation liquor extraction, and substitution, substantially as and for the purpose set forth.