

No. 4336. FREDERICK BRANDFOOT, Toronto, Ont., 30th January, 1875, for 5 years: "Drum-Heater." (Poêle Sourd.)

*Claim.*—1st. A drum-heater constructed of an outer drum A, and an inner drum B, to contain water held suspendedly by radial tubes C, for the diffusion of heated air; 2nd. A drum heater constructed of an outer drum A, and an inner drum B, to contain water held suspendedly by tubular openings E, in the circular ends of the drum; 3rd. A drum-heater constructed of an outer drum A, and an inner annular V shaped drum B, having corresponding openings E at the ends, as set forth.

No. 4337. GEORGE B. TINKER, Beebe-Plain, Que., (Assignee of E. N. Bacon) 1st February, 1875, for 5 years: "Ox Bow Fastener and Guard." (Ajustage et garde de joug à bœuf.)

*Claim.*—1st. The bow fastener consisting of the box D, notched pawl G, pawl H, and spring A, combined to operate as set forth; 2nd. The box D, extended as shown at E, and guards F, as set forth.

No. 4338. DAVID C. MORENCI, Lévis, Que., 1st February, 1875, for 5 years: "Machine soufflante." (Blowing Engine.)

*Résumé.*—L'emploi des pistons-cloches concentriques avec l'axe du balancier qui les porte, de sorte que le frottement est réduit à celui d'une feuille de fer blanc, rencontrant l'eau par sa tranche, ce qui est presque nul, et l'emploi de ces boîtes intérieures D, qui empêchent le déplacement du liquide, et qu'il n'y a à peu près qu'un quart de pouce de différence entre la boîte D et le piston C, qui la recouvre.

*Claim.*—The employment of bell shaped pistons concentric with the axis of the beam which bears them, so that the friction is reduced to that of a sheet of tin, catching the water by its edge, which is reduced to the smallest dimensions, and to use of the internal boxes D, which prevent the displacement of the liquid, leaving scarcely a quarter of an inch of difference between the box D and the piston C which covers it.

No. 4339. GEORGE MCEWAN and CHARLES O. GIBSON, Rock-Island, Que., (Assignees of G. Batchelder) 1st. February, 1875, for 5 years: "Milk Pan." (Boîte à lait.)

*Claim.*—1st. The tubular frame B, in combination with the pan A, applied as set forth; 2nd. The cup F, employed as set forth in combination with the tubular frame B, having bent outlet as described; 3rd. The process of cooling milk from the interior of the pan A, by submerged tubes as set forth.

No. 4340. CHRISTOPHE SCHAAL, Brooklyn, and CONRAD BANER, New-York, N. Y., U. S., 1st February, 1875, for 5 years: "Ice Breaking Boat." (Bateau brise-glace.)

*Claim.*—1st. An ice breaking boat constructed with rotary blades D, D, in front of its bow, for cutting the ice into strips; 2nd. In combination with the rotating cutting blades D, D, the vertically reciprocating crushers E, E, or arranged on the boat, for breaking the ice in the manner described; 3rd. The paddle wheel I of the ice breaking boat, made with the clam projections on its radial arms; 4th. The ice breaking boat A, made with a compartment L for letting in the water and increasing the weight of the vessel, said compartment being combined with the valve r, and suction pump m, as described.

No. 4341. THOMAS C. WILLIAMS, Richmond, Va., U. S., 2nd February, 1875, for 5 years: "Process of preparing Plug Chewing Tobacco." (Procédé de préparation du tabac en tablettes pour chiquer.)

*Claim.*—1st. The described process of preparing plug tobacco by first laying the leaves in moulds then pressing them under strong pressure into sheets or blocks, equal in thickness to the desired width of the plugs, and then cutting the plugs therefrom flatwise across the leaves as specified.

No. 4342. CEVEDRA B. SHELDON, New-York, U. S., 2nd February, 1875, for 5 years: "Butter Package." (Emballage du beurre.)

*Claim.*—1st. The combination of the wooden top E and bottom C, with downward tapering metallic sides and metallic bottom B; 2nd. In combination with any metallic package, with tapering sides, the wire F arranged and acting as described; 3rd. In combination with any metallic package with tapering sides, the wire F, with hoop G; 4th. The bottom B, rolled to form seat to receive the tapering sides and giving hoop B', round same as described; 5th. In combination with any metallic package, the hoop H, with flange H'; 6th. The combination of the ear I, secured to side of package and provided with stop K, with clip L, secured to lid E as

described; 7th. The combination in any metallic package of the wooden cover E, provided with slot P, and the clips O, secured to metallic sides A as described; 8th. The combination in any metallic package of the hinged bar Q, secured to the sides and slotted to receive the eye R, secured to lid E, and bar S, secured to sides and slotted to receive tongue of bar T, as described.

No. 4343. THOMAS C. WILLIAMS, Richmond, Va., 2nd February, 1875, for 5 years: "Improvements on Plug Tobacco." (Perfectionnements au tabac en tablettes.)

*Claim.*—Blocks or plugs of tobacco, severed flat wise across the leaves from previously pressed sheets or blocks of sufficient thickness to produce the requisite width of plugs as specified.

No. 4344. ELLEN E. FITZ, St. John, N. B., 2nd February, 1875, for 5 years: "Method of Mounting and operating Globes." (Mode de montage et de fonctionnement des globes.)

*Claim.*—1st. The manner in which the earth's surface upon any date of the year is described by the seasons of day twilight and night together with the sun's course with respect to the horizon of any given terrestrial point, the whole basin as stated; 2nd. The arched standards H, I, in combination with the inclined globe G, and disc D; 3rd. Mounting the standards H, I, upon a frame or support independent of the base A, and sliding thereupon to and fro with respect to the globe; 4th. The pointers c and e in combination with the globe G, and graduated disc D, or the globe and the horizon ring K, and band L; 5th. The graduated disc D, pointers c, and e, and globe G; 6th. The combination of the globe G and disc D, when the latter rotates centrally upon an axis and supports the globe and has a scale of division engrossed upon its upper surface to represent the signs of the zodiac; 7th. The disc D, rotating centrally upon an axis supporting the globe G, and provided with the graduated scale representing the signs of the zodiac; 8th. The horizon ring K, in combination with the globe G; 9th. The horizon ring K and band L, united and scored as explained; 10th. The general combination of the elements of the described apparatus or instrument consisting of the base A, standards H, I, disc D, globe G, pointers c and e and ring K, the whole being as stated.

No. 4345. WILLIAM J. DOREMUS, New-York, U. S., 2nd February, 1875, for 15 years: "Oscillating Spring Chair." (Chaise à bascule sur ressorts.)

*Claim.*—1st. The combination of the feet A, the flanged and notched lower plate B, the flanged top plate C, and the bolts D, with each other as described; 2nd. The pivot E, formed solid upon the top plate C, of the base A, B, C, D, and which receives the bar or plate F, that supports the chair frame as described; 3rd. The combination of the bolts J, and the rubber blocks K and M, with the bars H of the chair frame I, and with the bar or plate F, pivoted to the base A, B, C, D, and whether one or two sets of the said bolts and blocks J, K, M, be used at each end of the said bar or plate F, as described; 4th. The combination of one or more rollers O, torsion rods P and keys Q, or equivalent fastener with the chair frame I, and with the seat leather or cloth N, as described; 5th. The combination of one or more rollers S, coiled springs T, and rods U, with the chair frame I, and with the back leather or cloth R, as described.

No. 4346. EBENEZER F. LANE, Swanzery, N. H., U. S., 2nd February, 1875, for 5 years: "Improvements on Game Apparatus." (Perfectionnements aux appareils de jeux.)

*Claim.*—The game described, consisting of the set pins D, the whip-staff B, grooved wheel A, and lash C, provided with the loop x to be played or used as specified.

No. 4347. WALTER S. SHIPE, Minerva, Ohio, U. S., 2nd February, 1875, for 15 years: "Plane Guide." (Guide-rabot.)

*Claim.*—1st. A plane guide consisting of a yoke with a clamping screw at one end and recessed guide extension at the opposite end, in connection with a pivoted arc-shaped connecting piece clamped to yoke extension and carrying the guide strip of plane, as specified; 2nd. The yoke B, having a recessed projecting end or extension with clamping screw for forming the seat of the graduated arc part of the connecting piece, and securing guide strip at any angle on plate, as set forth.

No. 4348. WILLIAM H. FARRIS, Cairo, Ill., U. S., 2nd February, 1875, for 5 years: "Water Circulating and Steam Generating Grate." (Grille pour la circulation de l'eau et la production de la vapeur.)

*Claim.*—1st. Hollow side grate bars for fire boxes constructed separately or together at different altitudes, and arranged in relation to the hollow bed-grate bars so as to form with the latter a