

Claim.—In combination with a centrifugal machine, of an amalgamated or mercury coated plate interposed between the revoluble basket, and the outer casing of the machine.

No. 12,919. Improvements on Spring Waggon Gears. (*Perfectionnements aux trains des wagons à ressorts.*)

Jeremiah P. Johnson and Benjamin J. Thorne, Toronto, Ont., 7th June, 1881; for 5 years.

Claim.—1st. The brace B placed at right angles with the axle, provided with suitable connecting rods C E forming a complete truss work, for the purpose of holding and supporting the springs, which are placed parallel with the axle, and work free and clear from all complicated fixtures.

No. 12,920. Improvement in Lamp Chimney Cleaners. (*Perfectionnement des nettoyeurs des cheminées de lampes.*)

Charles W. Ferguson, Jamesville, Wis., U. S., 7th June, 1881; for 5 years.

Claim. 1st. The curved spring padded hoop A moulded to conform to the shape of the lamp chimney and of one piece. 2nd. The neck extension E of the spring hoop. 3rd. In a lamp chimney cleaner of one piece of strap metal padded as set forth, the interior return c of the neck extension E, whereby an inducing and bracing spring is obtained. 4th. In a lamp chimney cleaner of one piece of strap metal padded as set forth, the single spring hoop A having the neck extension E, and the lower depression F adapted, by moulding and fastening to the sloping handle B, to give angle of contraction meeting, and reinforce d d.

No. 12,921. Improvements on Sluice Gates for Mill Dams, &c. (*Perfectionnements aux portes des écluses de moulins, &c.*)

Maggie Tainter, Jeremiah B. Tainter, Menomonee, and James Downing, Tiffany, (Assignees of Thomas Parker, Menomonee), Wis., U. S., 7th June, 1881; for 15 years.

Claim.—1st. A sluice way gate provided with a segmental or curved surface, and adapted to be connected to a central shaft D, forming a fulcrum thereto. 2nd. A sluice-way gate provided with a segmental or curved surface, which is eccentric to the fulcrum upon which the gate is made to swing. 3rd. The back stays c c c of the segmental gate B placed at unequal distances apart and arranged nearer together at the lower portion of the gate. 4th. The combination of the gate B, adjustable packing strips F and levers H h h. 5th. The combination of the segmental gate B, shaft D and windlass K.

No. 12,922. Improvement in Underground Telegraph Lines. (*Perfectionnement aux lignes télégraphiques souterraines.*)

The Canadian Telephone Company, Montreal, Que., (Assignee of William W. Jacques, Boston, Mass., U. S.), 7th June, 1881; for 5 years.

Claim.—1st. A compound for insulating telegraph wires composed of beeswax and Venice turpentine. 2nd. The combination of an electrical conducting wire and an insulating compound composed of beeswax and Venice turpentine surrounding the wire.

No. 12,923. Improvements in Grain Driers and Coolers. (*Perfectionnements aux séchoirs et rafraichisseurs de grain.*)

Frederic H. C. May, (Co-inventor with Michael J. Stark), Buffalo, N. Y., U. S., 7th June, 1881; for 5 years.

Claim.—1st. A drier or cooler for grain, &c., having a series of vibrating pans provided with means for operating them, said pans having a terrace-like surface over which the substances to be operated upon are passed, formed by slats having upwardly pointing ledges underlapping the next succeeding slat, and a blowing engine having pipes terminating within the parts below the terrace like surface G for producing an air blast through the chamber in said pans. 2nd. A series of vibratory pans composed of the bottom plate E, end plates F F' and the sides, said pans being provided with a series of narrow slats G having upturned longitudinal edges H, the slats being constructed to overlap the upturned part. 3rd. The combination, with the pans A having the horizontal pipes V, with downwardly bent branches V' and flanges V₂ of the supply pipes T having branches with horizontal flanges W, resting loosely upon one another, to allow of the vibration of the pans. 4th. In combination with the uprights I having cross pieces L with upwardly pointed projections M, the plates N having the inverted V-shaped sockets on one end, and projections on the other end, and the pans A, provided with inverted V-shaped sockets P. 5th. A series of vibratory pans arranged in pairs with the terrace like surface G inclining in opposite directions, the pairs being operated as described, each pair in the same direction and supported by means of the cross pieces L, having projections M, plates N, with V-shaped sockets O, and plates F forming the end plate of the pans.

No. 12,924. Improvements in Sewing Machines. (*Perfectionnements aux machines à coudre.*)

Lebbens B. Miller and Philip Diehl, Elizabeth, N. J., U. S., 9th June, 1881; for 5 years.

Claim.—1st. A shuttle driver for sewing machines, having the horns b₁ b₂ adapted to engage with the rear and forward portions of the bobbin case of the shuttle, said horn b₂ being extended forward in the direction of the beak of the shuttle to a point in advance of the tip of said beak. 2nd. A shuttle driver for sewing machines, having the horns b₁ b₂ adapted to engage with the rear and forward portions of the bobbin case of the shuttle, said horn b₂ being extended forward in the direction of the beak of the shuttle to a point in advance of the tip of said beak, and provided with the slot b₅. 3rd. The combination, with the main driving shaft and connecting rod of the driving rock shaft I provided with the cam C, the lifting rock

shaft E provided with arm C₂ and forked arm C₁, and the feed bar K. 4th. The combination, with the driving shaft C having the cam d and the feed bar K, of the feed rock shaft F having arms e e and forked connecting piece J, and an intermediate adjustable device to which said connecting piece J is connected near its forked end, whereby during the rotation of the driving shaft, a compound vibratory and longitudinally reciprocating movement is imparted to said connecting piece J, and the said movements varied for the purpose of varying the feed.

No. 12,925. Improvements on Hydrocarbon Furnaces. (*Perfectionnements aux foyers à hydrocarbures.*)

Joshua W. Houchin and Joshua R. Houchin, Brooklyn, N. Y., U. S., 9th June, 1881; for 5 years.

Claim.—1st. The combination of one or more liquid vapourizing nozzles M entering the lower part of the kindling box, with a superjacent air nozzle N, arranged to intercept the vapours as they pass from the kindling box into the body of the furnace. 2nd. The combination of one or more vapourizing nozzles M, having air valves m and feed pipes o, conveying liquid fuel to the mouth of said nozzle or nozzles, with a superjacent adjustable nozzle N arranged to direct a sheet jet of blast over the fire bridge into the body of the furnace. 3rd. The combination of one or more liquid vapourizing nozzles M with a separate air blast nozzle N, arranged to act upon the vapours as they enter the body of the furnace. 4th. The combination with a hydrocarbon furnace, the air blast nozzle N, extending about the full interior width of the furnace and provided with an adjustable valve P, to regulate the thickness of the jet and discharge opening without affecting its width. 5th. The blast heating flue G interposed in the escape flue E between the furnace proper and the chimney, in combination with the air pipes i K L, and their inlet and outlet pipes j L.

No. 12,926. Machine for Blackening and Burnishing the Edges of Outside Seam Stays for Boots and Shoes. (*Machin pour noircir et brunir la tranche des bandes de cuir qui couvrent les coutures des chaussures.*)

Frederick W. Nichols and Henry P. Lancaster, Lynn, Mass., U. S., 9th June, 1881; for 5 years.

Claim.—1st. The apparatus for holding and rotating stay coils, consisting of the shaft b, bearings c c, pulley d, face plate a with its radial slots f f f, movable blocks f₁ f₁ f₁, clutches f₁ f₁ f₁, springs g g g, K K K, clutch levers h h h and clamping ring t. 2nd. In combination, the rotary and laterally adjustable brush n, its shaft l with central perforation l₁, pulley o, heater i, hood s and central conveying tube s₁. 3rd. In combination with the rotary and laterally adjustable brush n, its perforated shaft l and heating device s s t, the rotary shaft b with its face plate a, and clutch f₁ f₁ f₁ g h i k. 4th. The method of blackening and burnishing the faces of stay coils, consisting of securing them upon a rotary face plate, applying a suitable ink or blacking thereto, and finishing by means of a quickly rotating brush that is adjusted to bear against the stay coil, and supplied with heat during the manipulation.

No. 12,927. Improvements on Measuring Machines. (*Perfectionnements aux machines à mesurer.*)

William A. Sawyer, Danversport, Mass., U. S., 9th June, 1881; for 5 years.

Claim.—1st. The combination of a series of independent measuring wheels, a feed cylinder or roller fitted for rotation by hand or power, weighted slide bars fitted for movement by the measuring wheels a pressure bar sustaining the slide bars and a gauge sustaining the pressure bar. 2nd. The combination of cylinder b, wheels f formed with grooved hubs f₂, bar h, friction rollers l, scale beam m and weighted rods n. 3rd. The treadle p, provided with arms p₁ and cross bar q, in combination with the weighted slides n. 4th. The measuring wheels f, provided with elastic tires f₁ and grooved hubs f₂, in combination with feed roller b and slide rods n. 5th. The adjustable feed roller b₁ in combination with the series of measuring wheels f and table a.

No. 12,928. Improvements in Refrigerators. (*Perfectionnements aux garde-manger.*)

John Alexander, Toronto, Ont., 9th June, 1881; for 5 years.

Claim.—In a refrigerator having cold air passages, for conducting the cold air from the ice chamber to the cooling chamber, and separate air passages for reconducting it into the ice chamber, the combination of a vertical ventilating flue leading from a point, at or near the bottom of the cooling chamber, to a point outside the refrigerator, at or near its top.

No. 12,929. Improvements on Buckles. (*Perfectionnements aux boucles.*)

Warren T. Reaser, Madison, Wis., U. S., 9th June, 1881; for 5 years.

Claim.—The buckle having a central cross bar C provided with an upwardly projecting stud E, having a slot e in its end, and a reversed tongue B pivoted to one of the end bars of the buckle frame with its free end fitting in said slotted stud.

No. 12,930. Improvement in Dairy Bureaux. (*Perfectionnement aux garde-lait.*)

Charles A. Mosher, Sharon, Vt., and George A. Mosher, Troy, N. Y., U. S., 9th June, 1881; for 5 years.

Claim.—1st. In an enclosure for regulating the temperature of substances, a series of draw pans arranged one above another and making close connection at the side walls, and constructed to break joints at the end walls of the enclosure to form a continuous air flue under, around one end of, and over each pan, and in combination, an egress opening J, refrigerating chamber L, flue O and ingress opening I. 2nd. In combination, a series of draw pans, arranged one above another and making close connection at