

No. 7447. Oil Cup for Carriage and Waggon Axles.

(*Godel a graisse d'essieux de voitures et de wagons.*)

Miles Latmer, Hastings, Mich., U.S., 10th May, 1877, for 15 years.

Claim—The arrangement of tapped oil cup C having head B stopper A and the thread end D the shell E having slot F and screwing slot J and tapped extremity K, in combination with the cylindrical valve G having stop valve and clearing pin H the whole combined.

No. 7448. Motive Power for Vessels.

(*Propulseur de vaisseau.*)

Thomas S. Seabury, New York, U.S., 10th May, 1877, for 5 years.

Claim—Propelling vessels by the aid of a motive power derived from the action of the sea upon a vessel provided with a submerged plate E, arms D and shaft C placed in the boxes B in the side A of a vessel.

No. 7449. Horse Shoe Nail Finishing Machine.

(*Machine a finir le clou a cheval.*)

Randolph Hersey, Montreal, Que., 10th May, 1877, for 5 years.

Claim—1st. The combination of the rest *e* having one or two anvils *d* and punch die *et*, with the vibrating slide *h* having openings *z* and *z*, and with the bevelling dies *az* and clipping dies *b*, 2nd. The combination of the spring arm W, sliding bar *h* having openings *z* and *z*, and tube *ez*, or tubes *ez* and *ez*. 3. The combination of the sliding bar *h* having openings *z* and *z*, and *z*, 4th. The combination of the spring lever W, sliding or vibrating bar *h* having nail recesses *z* and *z*, stop *gz* and set screws *v* whereby the bar *h* is caused to remain stationary at the end of each of its strokes. 5th. The combination of the sliding bar *h* having openings *z* and *z* with dies *b* and a *cb*. The combination of the dies *b* with guides *v*. 7th. The combination of the guides *z*, with the auxiliary guides *v*. 8th. The combination of the sliding bar *h*, pendulum B and tube *et*, or tubes *et* and *ez*. 9th. The combination of the guides *z* with springs *sz*. 10th. The combination of the guides *z* with bolt *p*. 11th. The combination of the guides *z*, springs *sz* and bolt *p*. 12th. The dies *b* having openings *ez*, and rest *qt* having openings *f* with guides *z* and *v*. 13th. In an elongated blank bevelling and clipping machine, the combination of a sliding or vibrating bar *h*, for holding the blanks with the bevelling and clipping dies.

No. 7450. Improvements in the Manufacture of Shovels.

(*Perfectionnements dans la fabrication des pelles.*)

Henry W. Shepherd, (Assignee of John Graves), New York, U.S., 19th May, 1877, for 5 years.

Claim—A shovel constructed out of a single sheet or piece of metal, having its handle projecting directly from the blade and the excess of metal left in forming the rim, being worked up to impart a half round or semi-circular form to the handle at its union with the blade and rim.

No. 7451. Improvements on Clutch Boxes.

(*Perfectionnements aux manchons d'embrayage.*)

Henry Martin, Lancaster, Pa., U.S., 10th May, 1877, for 5 years.

Claim—The spiral rib *a* on the clutch sleeve D, and in combination therewith a lever *b*.

No. 7452. Improvements on Hoisting Machines.

(*Perfectionnements aux elevateurs.*)

Corydon Knowlton, Sangerville, Me., U.S., 12th May, 1877, for 15 years.

Claim—1st. The arrangement of the driving wheel G and its pinion E, operating on an axle independent of the shafts of the wheels B and C, and is about a line with the latter; 2nd. Providing the yoke A with a lug H for carrying the axle of the wheel G and pinion E; 3rd. The provision of a brake S, one end secured to the yoke A and coiled around a hub P, cast with the driving wheel G; 4th. The yoke A constructed with the lower ends united and provided with a hook I, for applying double purchase.

No. 7453. Improvement on Glass Veneers.

(*Perfectionnement dans le plaquage en verre.*)

James Budd, New York, U.S., 15th May, 1877, for 5 years.

Claim—1st. The process of manufacturing ornamental glass veneers and panels consisting of, first: Applying to the rear face of the glass a design in colors by painting or transferring, second: Applying over the whole a coating of colors composed of dry colors and Portland cement or plaster of Paris mixed in a solution of gelatinous matter. third: A second coating of colors ground in japan and finally backing the whole with an impervious coating composed of varnish and plaster of Paris or Portland cement. 2nd. The process of manufacturing glass panels and veneers consisting of first: Applying to the rear face of the glass a coating of colors composed of dry colors and Portland cement or plaster of Paris mixed in a solution of gelatinous matter, second: A second coating of colors ground in japan and finally in backing the whole with an impervious coating or backing of varnish and Portland cement or plaster of Paris. 3rd. A glass veneer or panel having on its rear face an ornamental design in colors, a second coating of colors and a protecting backing of Portland cement and varnish combined or of varnish and plaster of Paris.

No. 7454. Improvements on a Churn.

(*Perfectionnements a une barail.*)

Michael Sweeney, Belleville, Ont. 15th May, 1877 for 5 years.

Claim—The combination of the standard B, key C horizontal bar D, lever F, pivot G, rack H, pinion J, guard K and blades M.

No. 7455. Apparatus for Cooling and Heating Milk.

(*Appareil a rechauffer et refroidir le lait.*)

Varenon P Hill, Hamuil, N. Y. U.S., 15th May, 1877 for 5 years.

Claim—1st. The combination of a series of vats G H I having circulating arteries connected by tubes F J to horizontal pipes D E and tanks A B having relative adjustment whereby an ebb and flow circulation is maintained by their alternative elevation. 2nd. The combination of a steam generator K, horizontal pipes D E and tubes F J, vats C H I having circulating arteries, and the tanks A B whose elevation is relatively adjustable for condensing the steam and supplying the generator. 3rd. The combination of a water heater having a coil *l*, pipes D D, tubes F J and one or more vats G H I having circulating arteries, and the tanks A B whose elevation is relatively adjustable.

No. 7456. Clothes Washer.

(*Laveuse a linge.*)

Albert Poirier, St. Jacques de l'Acadigon, Que. 15th May, 1877, for 5 years.

Resume—La boite A dans ses differentes dispositions, et la maniere de s'en servir.

No. 7457. Process of Heating and Brazing Brass Tubes.

(*Procedé pour chauffer et braser les tuyaux de cuivre.*)

Jules Werneininger and Charles Maus, Montreal, Que. 15th May, 1877, for 5 years.

Claim—The combination of the roseets L M the cutter N and the furnace and its attachments A, the opening to feed B the opening through which the heat strikes the tube, the grate bars C blow pipe D ash pit E, plug F throttle valve G standard H, and the box or casing J.

No. 7458. Improvement on the Combustion of Liquid Hydro-Carbons.

(*Perfectionnement dans la combustion des hydro-carbures liquides.*)

Thomas H. Hicks and Thomas H. Tracey, London, Ont., 15th May, 1877, for 5 years.

Claim—The combination of heated air with steam and tar for the more perfect combustion of the same.

No. 7459. Automatic Gas Lighter.

(*Allumoir automatique a gaz.*)

John Ruthven, Ottawa, Ont., 15th May, 1877, for 5 years.

Claim—1st. The box C or its equivalent provided with a projecting flanged guide B, and containing the band I, in combination with the spring trigger K for the purpose of igniting the gas escaping from the burner A, to which the apparatus is attached; 2nd. The thumb-wheel H and wipers E or their equivalent, in combination with the projecting sides K of the trigger K. 3rd. The trigger K attached to the guide B, and provided with a striking point L, in combination with an intermittently moving band I charged at regular intervals with a fulminating compound.

No. 7460. Improvement in Steering Propellers.

(*Perfectionnement dans la maniere de gouverner les batavats a helice.*)

Frank G. Fowler, Bridgeport, Ct., U.S., 15th May, 1877, for 5 years.

Claim—1st. The index A in combination with a marine propeller whose thrust or propelling force can be exerted in a direction corresponding with any point of the compass; 2nd. With scale *m* in combination with the index A and a marine propeller whose thrust can be exerted in any direction.

No. 7461. Improvements in Weaving Looms.

(*Perfectionnements aux metiers a tisser.*)

James Lyall and William Lyall, New York U.S. 15th May, 1877, for 5 years.

Claim—1st. The mechanism for producing a dwell in the backward movement of the lay while the shuttle is being moved. 2nd. The combination of the mechanism specified for producing the dwell movement of the lay with the mechanism for producing two blows of the lay on the filling. 3rd. The mechanism for producing a dwell movement in connection with the shuttle carriage and positive motion shuttle. 4th. The shuttle K and shuttle carriage *h*, in combination with the neway *g* shuttle rail *ki*, and bobbin or spool holder. 5th. The yielding arms *f*, with eyes for the weft thread in combination with the bobbin or spool and the shuttle. 6th. The hook is actuated by the bent lever *h* as the lay presses up the filling, in combination with the slide bar *js* and stock *cs*. 7th. The combination of the dwell mechanism for the lay with the shuttle carriage *h*, neway *g*, positive motion shuttle *k* and shuttle rail *ki*. 8th. The combination, in a positive motion loom in which the shuttle is moved across by a reciprocating carriage of a dwell motion mechanism for actuating the shuttle and a dwell motion mechanism for actuating the lay. 9th. The combination in a loom for weaving irregular fabrics of a fractional traction for the fabric and a pawl bar with a range of holding pawls, standing away from the lay; 10th. In a loom for weaving irregular fabrics, a pawl bar near the fell provided with numerous pawls standing away from the lay.