

No. 9022. Improvements on Hand Trucks.*(Perfectionnements aux camions à bras.)*

George P. Clark, Windsor Locks, Ct., U.S., 15th July, 1878, for 5 years.

Claim.—1st. A wheel composed of two compressing discs, each of which is provided with a peripheral flange, an annular shoulder, and a section of hub, in combination with an annular rim of vulcanized rubber or other non-sounding material; 2nd. The combination with an annular compressible rim, of two metallic discs, each of which has an annular shoulder for supporting the rim, and an annular flange, which is bevelled inward from its periphery to said shoulder.

No. 9023. Improvements in Lift Pumps.*(Perfectionnements dans les pompes aspirantes.)*

Emory Barnes, Mount Pleasant, Mich., U.S., 15th July, 1878, for 15 years.

Claim.—In combination with the submerged pump cylinder having a perforated or open bottom and with a piston C, having valves a, a rod D and valve d.

No. 9024. Improvements on Car-Couplings.*(Perfectionnements aux atelages de wagons.)*

Jacob N. Best, Denver, Colorado, U.S., 15th July, 1878, for 5 years.

Claim.—1st. The form of the cavity in the draw-head; 2nd. The coupling pin having a flange wrought on its side by which it is strengthened, in combination with the bar D, lifting rod E and dog F.

No. 9025. Improvements on Harvester Reels.*(Perfectionnements aux réateaux des moissonneuses.)*

John J. Dewey, Lake, Minn., U.S., 15th July, 1878, for 5 years.

Claim.—The Y-shaped metal bar L, having journal bearings l h, V-shaped brace M and crank shaft O in combination with the vertically vibrating reel and its operating mechanism.

No. 9026. Non-Conducting Covering for Steam Boilers.*(Couverture non-conductrice pour les chaudières à vapeur.)*

Benjamin F. Smith and Charles J. Lewis, New Orleans, La., U. S., 15th July, 1878, for 5 years.

Claim.—A covering composed of the hulls of either cotton seed or rice seed, or a mixture of both confined in a fixed condition.

No. 9027. Window Cleaning Step Chair.*(Chaise-marche-pied pour le lavage des fenêtres.)*

Anna Dormitzer, New York, U.S., 15th July, 1878, for 5 years.

Claim.—1st. A step-chair having a folding back, a folding brace and a folding front support; 2nd. The combination of the levelling screws f with the plate arm A; 3rd. The combination of the standard n with the platform A; 4th. The combination of the hinged brace E, chains F, screw d and travelling nut G, with the platform A; 5th. The combination of the auxiliary step h with the support H and platform A; 6th. The combination of the springs l and eccentric m, with the support H.

No. 9028. Improvements on Grate-bars.*(Perfectionnements aux barres de grilles.)*

Thomas Murphy, Detroit, Mich., U.S., 15th July, 1878, for 5 years.

Claim.—1st. The combination of two sets of alternating and inclined bars D D', with a supporting frame A, and a feathered rock shaft C, adapted to vibrate the bars D' of each set; 2nd. The combination of the toothed cylinder B with the frame A; 3rd. The combination of the toothed cylinder B with the frame A and stationary and vibrating bars D D'; 4th. In combination with the frames A of the triangular grate frames E E', in an alternating series, the said frames E' being susceptible of a lateral vibration from the rock shaft C, hung in the frames E; 5th. The arrangement of the two sets of transverse grate bars, inclined from the sides of the fire-box towards each other; 6th. The combination of two sets of transverse grate-bars, inclined from the sides of the fire-box towards each other, and revolving toothed cylinders.

No. 9029. Improvements in Reaping Machines.*(Perfectionnements dans les moissonneuses.)*

Matthew Garvin, New Castle, Ont., 15th July, 1878, for 5 years.

Claim.—1st. The gear jack F constructed in a single casting and provided with lugs, bearings and brackets to receive the several connecting parts of a reaping machine; 2nd. The gear jack F, in combination with the frame D and operating parts of a reaping machine; 3rd. The lifting lever J, pin J₂, gear jack F, with upwardly projecting ratchet-plate and lugs f f, quadrant plate J₃ and chain J₃, in combination with the table of a reaping machine, and the guide and supporting standard G; 4th. The lifting lever J pivoted on the frame at a point in rear of the driving wheel axle and extending forwardly, upwardly and towards the driving wheel, to a point within convenient reach of the operator; 5th. The shifting lever H working within an inflected slot i, in combination with the sliding pinion B and driving shaft C; 6th. The casing I provided with inflected slot i for lever H, and extended to form a protecting cover for the toothed gearing A: B C C'; 7th. The combination and arrangement of the tilting lever K with the angle rod K₁, rod E, frame and connections of a reaping machine; 8th. The rake brackets N with pivoted spring, lifting and locking latch N₁, in combination with and pivoted upon the rake arm levers M, which arms are provided with a curved slot to allow of a limited rolling movement by the rakes, and are also provided with a latch locking notch; 9th. The rake arm brackets with spring locking latch and the rake arm lever with curved slot and locking notch, in combination with the tripping roller O; 10th. The rake arm brackets provided with the projection N₂, in combination with the bearing plate P provided with the shoulder P₁ for reversing the position of rakes, and mounted in such a manner that it is sufficiently flexible to allow the rake arm brackets, when the rakes are operating, to slip over the shoulder P₁; 11th. The loosely mounted tripping roller O mounted in such manner that it will trip the rake bracket latches, or may be drawn out of the way

to allow the rakes to operate; 12th. The foot lever Q₁ with rod or rope and bell crank connection, in combination with the tripping roller O, which roller is held in and returned to position by a spring; 13th. The combination of the tripping roller O, flexible bearing plate P with shoulder P₁, with the rake arm levers and rake arm brackets of a reaping machine; 14th. A second tripping roller O₁ with corresponding shoulder on the plate P, arranged in combination with rolling rake arms for the purpose of reversing the position of the rakes, at or about the termination of the cutting table; 15th. The seat S and spring standard S₁ mounted on the frame of machine, in such manner that it is adjustable in height to suit the requirements of different operators; 16th. The rake arm levers provided with a loose friction roller R.

No. 9030. Improvements on Self-creamers.*(Perfectionnements aux boîtes à lait.)*

George A. Evans, Kingsey, Que., 15th July, 1878, for 5 years.

Claim.—1st. The combination of the cream gatherer B, with milk vessel A; 2nd. The combination of the movable stopper or bottom E; 3rd. The combination of vessels A and B, faucet D, movable stopper E, with the thumb screw F, neck J and socket K.

No. 9031. Mode of Transmitting, Receiving and Recording Telegraphic Despatches.*(Mode de transmettre, recevoir et enregistrer les dépêches télégraphiques.)*

G. Boucher de Boucherville, Quebec, 18th July, 1878, for 5 years.

Résumé.—L'emploi de signes négatifs prolongés, dont le nombre d'espaces typiques contenu en eux, mesurés sur le signe positif qui est le trait typique ou l'unité de mesure, indique le nombre ou la lettre télégraphique, et pour la transmission, réception, enregistrement et vérification de tels traits typiques et espaces typiques, le clavier à espaces typiques et à décharge A, le commutateur B, les boutons C et D, l'indicateur E et le repère F, le manipulateur G, la tige T et les boutons P et Q, l'essieu H avec son bras X X₁, la rainure R et la vis J, la traverse de support K, les ressorts L fixés sur le cercle métallique N, et les ressorts M fixés sur le cercle métallique O, la bande graduée B₁, le vérificateur typique A B P B₁ A₁, tous combinés tel que décrit.

No. 9032. Improvements in Paper Boxes.*(Perfectionnements dans les boîtes en papier.)*

Peleg Clarke, Dundas, Ont., 18th July, 1878, for 5 years.

Claim.—1st. A paper box constructed as specified, and composed of the strips A and B, folded as shown, to make the inner form as described, also the outer form C, cut and constructed with the folds e f, as shown, and with the additional folds or projections a a b as shown; 2nd. The combination of the strips A and B, of the inner form, and the outer form C, and so combining them that the contents of the box is held by means of the levelled lip g, of the strip A, being pressed down at one end of the box between the inner and outer forms; 3rd. The strip A cut at the line x z, folded at the dotted lines, and used in combination with the strip B, making two sizes so that, when combined one within the other, a modification of the inner form will be in telescopic shape and enclosed in the outer form.

No. 9033. Improvements on a Steam Boiler.*(Perfectionnements à une chaudière à vapeur.)*

Dana N. Allen, Concord, N.H., U.S., 18th July, 1878, for 5 years.

Claim.—1st. The water jacket H wholly enclosed within the combustion chamber; 2nd. The water jacket H connected with the outer boiler by bent water pipes a, thimbles c, and vertical water tubes b, in combination with the outer casing C and water and steam spaces above the fire pot traversed by the tubes i; 3rd. The boiler provided with an outer smoke jacket C, an auxiliary combustion chamber F, annular flue f and the outlet pipes J and K, one of which connects directly with the auxiliary combustion chamber and the other with the smoke jacket; 4th. The bed plate B provided with the smoke g and h, in combination with the water jacket H, outer boiler and smoke jacket C; 5th. A steam boiler composed of the several parts described and shown, combined and arranged for joint operation in the manner specified.

No. 9034. Improvements on Triturating Machines.*(Perfectionnements aux machines à triturer.)*

John R. Alsing, Stockholm, Sweden, 18th July, 1878, for 10 years.

Claim.—1st. A triturating cylinder C, in which the corner slabs C₁ are conceived in the end of the diagonal, opposite to the corner, to form a curved junction C₃ between the inner cylindrical and end surfaces; 2nd. A triturating cylinder A formed by the combination of the outer iron cylinder A₁, the intermediate wooden cylinder B and the inner glass or porcelain cylinder C, the latter being made of blocks c c' cemented by plaster of Paris and glue to the wooden cylinder; 3rd. A triturating cylinder A curved at C₃ in the junction between its inner cylindrical and end surfaces, and in which an inner cylinder C is made of glass or porcelain by cementing corrugated glass or porcelain slabs or blocks c c' by plaster of Paris and glue upon the wooden lining B of the iron cylinder A₁; 4th. The combination of the triturating cylinder A, consisting of the iron cylinder A₁, the wooden cylinder B and the glass or porcelain cylinder C, with the hopper E, the axial inlet and outlet pipes F G, the fan H, and the canvas bin K provided with the incline K₁, and the bottom receptacle or hopper L; 5th. The combination of the canvas bin K having the incline K₁, hopper L and spout I, with the vibrating tube N, the tub O, the revolving upright shaft k, having radial arms r, the water pipe P, and the conveying discharge pipe Q; 6th. The combination of the triturating cylinder A, hopper E, axial inlet and outlet pipes F G, fan H, canvas bin K having incline k and hopper L, vibrating tube N tub O, stirring shaft R, water pipe P and conveying discharge pipe Q, and their several regulating valves and dampers.