

No. 10,076. Improvements on Strip-Cutting Machines. (*Perfectionnements aux machines à tailler les bandes.*)

David H. Burrell, James H. Ives, Rodney S. Whitman and David H. Burrell, Little Falls, (Assignees of James Naylor, Jr., Rochester, N. Y., U. S., 7th June, 1879, for 5 years.

Claim.—1st. The knife B, having a sliding pivotal movement at one end and a circular motion at the other, in combination with the crank shaft D, the crank of which is directly connected with the knife carrier; 2nd. The cutting knife B, having a comparatively small movement for cutting the edge of the strip, in combination with the knife B having a greater scope of motion to cut its width and their operating shafts and gear; 3rd. The combination of the cutting knives, their driving gear and the shaft D E, the knives and shafts being set at an obtuse angle to each other, for the purpose of reducing friction and giving a free exit to the cut strip; 4th. The feeding screw H, operating upon the surface of the log to feed it forward; 5th. The toothed pawls L, acting upon the outer surface of the log, in combination with their operating mechanism consisting of the rock shaft J, its arms and the crank G upon the shaft D; 6th. The screw feed wheel H, operated by the knife B, in combination with the pawls L and their actuating mechanism, for the purpose of feeding the log; 7th. The horizontally moving centre M, provided with the eccentrics n, in combination with the pawls Q and rack R, for the purpose of moving the log horizontally to the cutters; 8th. The feeding devices, consisting of the vertically moving spring supported blocks U, in combination with the rotating centre chuck and cam S; 9th. The feeding devices, for rotating the log upon its axis, in combination with the mechanism for giving a horizontal movement to the same, while being cut into strips; 10th. The sectional knives B attached to their carrier by the convex holding plates c and bolts d to allow of their ready removal and re-attachment; 11th. The horizontally moving boxes O and O' in combination with the weights W and their connecting cables, for the purpose of automatically retracting the boxes; 12th. The inclined bed Y, in combination with the retracting centres and vertically cutting knife B, for the purpose of facilitating the introduction of the logs and removal of cores.

No. 10,077. Improvements on Reaping Machines. (*Perfectionnements aux moissonneuses.*)

John V. Schaaf, Bowmanville, Ont., 7th June, 1879, for 5 years.

Claim.—The serpentine projection marked C, producing the double motion, in combination with the knives E E, rollers G G, swivels H H and connecting rods D D D D.

No. 10,078. Manufacture of Corsets and Pads. (*Fabrication des corsets et matelas de poitrine.*)

John C. Tallman, New York, U. S., 7th June, 1879, for 5 years.

Claim.—1st. The combination, in a corset, of the steel c, front lace b, and intermediate elastic gore d; 2nd. A corset provided with a flexible tongue y, extending below the end of the steel and having connecting devices a; 3rd. The combination, in a corset, of the steel c, flexible tongue y, bones w and gore d extending downward in juxtaposition to said tongue; 4th. The combination, in a corset, of two series of cross bones f f, and intermediate flexible portion t at the hip; 5th. The series of bones f f, extending each upward from one edge of the under arm portion and converging toward the centre; 6th. The combination, with the transverse hip bones, of longitudinal bones x; 7th. A corset provided with lacings u adjacent to the breast receptacle; 8th. A corset provided with a laced opening z between the centre and hip at the back; 9th. The sheets or sections of fabric, each having the warp or weft only of stiff material and arranged with the stiff fibres of one section at an angle to those of the other section; 10th. A corset, formed in whole or in part of the described compound fabric, consisting of layers each with a warp or weft, only, of stiff material, arranged so that the stiff fibres of one layer are at angle to those of the other layer; 11th. A corset having sections of grass cloth or equivalent material, with edge bindings e lapped over and united; 12th. The strip t combined with the lapped and bound sections; 13th. In a corset having grass cloth sections, the combination, with said sections, of flat blades of whalebone or other suitable substance, arranged immediately to the edges of said sections at an angle to the stiff fibres of the cloth; 14th. The combination, in a corset or bosom pad, of the sections or strips d, of textile fabric, stitched together and to a section or strip w of grass cloth or other stiff fabric and a grass cloth section, secured by stitching at the front or rear of the strip d; 15th. The combination, in a corset having grass cloth sections, of strips d overlapping the edges of contiguous sections, at the outside thereof, and strips w, at the rear, secured to each other and to the sections, by stitching; 16th. A corset or pad consisting, in whole or part, of grass or china cloth tempered under heat and pressure.

No. 10,079. Improvements on Musical Instruments. (*Perfectionnements aux instruments de musique.*)

Mason J. Matthews, Boston, Mass., U. S., 7th June, 1879, for 15 years.

Claim.—1st. In combination with a wind chest, a reed box provided with a series of reeds, each turned to a different pitch, and a strip or sheet of paper, or other thin flexible material, having formed therein a series of perforations arranged to represent the various notes of a tune, the bars or plates E E secured one to each end of the wind chest, reed box, or wind chest and reed box and adapted to support a paper carrying roll at either end thereof; 2nd. The combination of the wind chest A, reed box B provided with a series of reeds, spring bars or plates E E, rolls F F, a strip or sheet of perforated paper H connected at each end to one of said rolls, and the frictional washer C C; 3rd. A strip or sheet of paper, or other thin flexible material having, therein, a series of perforations arranged in the proper order to represent the various notes of a tune, and also having, formed in each end thereof, a single perforation, the edge of which is reinforced or strengthened as a means, in combination with a pin, of securing said strip or sheet of flexible material to the feeder carrying rolls; 4th. The combination of the wind chest A, reed box B provided with a series of reeds, a strip or sheet of perforated paper, or other flexible material, H and the two rolls or cylinders F F, each provided with a crank d and with means for readily attaching one end of

said strip or sheet of paper, or other flexible material thereto; 5th. The roll F or F' having, formed therein, the two longitudinal slits e f extending through, or nearly through, the same at right angles, or nearly so, to each other and having pivoted in one of said slits the lever G provided with the angular projection g; 6th. The two rolls F F', each provided with a crank and having formed therein the two longitudinal slits e f, in one of which is pivoted the lever hook G g, in combination with a wind chest, suitable means of supplying wind thereto, a reed box provided with a series of reeds and a strip or sheet of paper, or other thin flexible material, having formed therein a series of perforations j j and two reinforced openings l l.

No. 10,080. Improvements on Car Couplings. (*Perfectionnements aux attelages des wagons.*)

James H. Hills, Burlington, Vt., U. S., 7th June, 1879, for 5 years.

Claim.—1st. A twin automatic coupling formed of forked intermeshing draw heads, each having a tumbler or pawl pivoted at the entrance of the forked heads, on one side thereof, projecting therefrom inwardly and laterally and adapted, as the draw heads intermesh, to impinge, mutually yield, pass over and spring into engagement with each other, and thereby effect the coupling action by their direct engagement, without the intervention of additional catches or locks; 2nd. In an automatic twin coupling, the combination, with a forked intermeshing draw head, of the pawl c pivoted on the front end of one prong thereof, projecting laterally and inwardly therefrom and formed with a shoulder n on its pivoted end, to engage with the front of the draw head; 3rd. The combination, with a forked draw head, of the pivoted spring acted pawl c, formed with a recess m to receive and protect the spring.

No. 10,081. Improvements on Folding Tables. (*Perfectionnements aux tables brisées.*)

David Marble, Detroit, Mich., U. S., 7th June, 1879, for 5 years.

Claim.—In combination with the table A, frame B, a c and legs B B, the bar D, adjustable shield F, slotted plate G with bolt b, thumb nut I and the hook H.

No. 10,082. Improvements on Musical Instruments. (*Perfectionnements aux instruments de musique.*)

Mason J. Matthews, Boston, Mass., U. S., 7th June, 1879, for 15 years.

Claim.—1st. In combination with a wind chest provided upon its upper side with a wind passage communicating therewith, a driving shaft or feed roll mounted upon the upper side of said wind chest, suitable wind moving bellows placed beneath said wind chest and a sheet or band of perforated paper passing over said wind chest and wind moving bellows, the detachable frame F, the secondary feed roll H having its bearings on said frame, the reed board G, provided with trunnion pins u u fitted to and resting in the slots u in the side rails of the frame F, and the springs v v; 2nd. The rocker shaft q provided at each end with a hook hasp q' and, at or near the middle of its length, with the operating lever or handle q', all formed from a single piece of wire.

No. 10,083. Improvements on Musical Instruments. (*Perfectionnements aux instruments de musique.*)

Mason J. Matthews, Boston, Mass., U. S., 7th June, 1879, for 15 years.

Claim.—1st. In combination with reeds and their air passages and a perforated sheet of paper, a series of valves constructed and arranged to be held in their seat or bed by the combined action of the said perforated sheet a d pneumatic pressure; 2nd. The combination of the friction rollers H P and perforated paper G with the valves c c; 3rd. In combination with a sheet of perforated paper and the valves c c, the hinged guide rails N N; 4th. A mechanical musical wind instrument having reeds and a sheet of paper suitably perforated to produce a tune in connection with valves, the reeds arranged in alternate positions in two rows; 5th. The combination of the reed chamber E provided with a series of reeds and wind passages, the pivoted bar F, a series of levers d, provided with angular or other suitable shaped push points d' and valves c, and pivoted to the bar F, and a sheet or band of perforated paper or other flexible material; 6th. In combination with a series of valves c, push points d' and a sheet or band of perforated paper G, the roll O adapted to strain the paper taut near the points of action upon the push points; 7th. A bar carrying spring fingers when arranged to be partially rotated about an axis to lift said spring fingers upward.

No. 10,084. Improvements in Steam Pumps. (*Perfectionnements aux pompes à vapeur.*)

Michael Schultz, Cincinnati, Ohio, U. S., 7th June, 1879, for 5 years.

Claim.—1st. In combination with the steam and pumping cylinders of a direct acting steam pump, the semi-cylindrical shell or frame J connecting the two wholly upon one side of their axial line; 2nd. In combination with the vertical frame and driving shaft of a direct-acting steam pump, the brace I, 3rd. The roller G, in combination with the yoke A, crank wheel F and pin P; 4th. The yoke A, provided with side flanges H, in combination with roller G; 5th. The continuous piston B cast with the yoke A in two parts; 6th. The combination, with the steam and pumping cylinders, of a direct-acting steam pump and a yoke for transmitting motion to a governing fly wheel, the crank wheel F and the shaft having its bearings upon the same side of the piston; 7th. The ball and socket joint, as a connection for the valve stem and eccentric rod; 8th. The method of attaching and retaining the bolts for holding the glands or covers for the stuffing boxes.

No. 10,085. Improvements on Suppository Moulds. (*Perfectionnements aux moules des suppositoires.*)

Henry C. Archibald (Assignee of Henry R. Heyl), Philadelphia, Penn., U. S., 7th June, 1879, for 5 years.

Claim.—1st. The mould E constructed of longitudinal sections, capable of being separated by lengthwise movements and seated between a shifting holder; 2nd. The combination of the sectional mould and shifting flask with