

No. 12,256. Improvements on Spring Waggon.

(*Perfectionnements aux wagons à ressorts.*)

Martin Halfpenny and Edgar B. Emmons, Pontiac, Mich., U. S., 22nd January, 1881; for 5 years.

Claim.—1st. The combination, with the wagon frame and circle bar, of the bracket H, having rollers H₁ journalled in its opposite ends and provided with pivoted connections H₂ and clutches H₃. 2nd. The combination, with the wagon frame and king bolt located at a distance back from the front of a frame, of a bracket located beneath the front of the frame pivoted to the frame, the said bracket having anti-friction rollers at its extremities running upon a circle bar beneath. 3rd. The combination, with the circle bar and wagon frame, of the bracket H, provided with rollers H₁ and pivotal connections H₂. 4th. The combination, with the platform and bolsters, of the plate B provided with a central opening and semi-circular ridges or bearings *b₁ b₂*; wearing plate B₂ provided with the tongue and groove connections *b₂*; and projecting collar *b₃*; cap plate B₃ and bolt B, the latter provided with a semi-cylindrical head which is located beneath the bearings *b₁*. 5th. In a platform spring wagon, side springs E, each made with a long and a short arm, the long arm made to project to the rear of the axle, and the short ends projecting forward of the axle and attached thereto, the said forward ends of the short arms provided with attachments for the draft. 6th. In a platform spring wagon, the arrangement of the bounds with their narrow ends forward and diverging from front to rear, the construction being such that the rear ends of the bounds form a bearing for the rear ends of the side springs, and the forward extremities of the bounds form a bearing for a cross spring located in the front of the axle.

No. 12,257. Improvements on Drag Sawing Machines.

(*Perfectionnements aux scieries à scies traînantes.*)

John Augspurger, Trenton, Ohio, U. S., 22nd January, 1881; for 5 years.

Claim.—1st. The combination of the supporting frame, the head a pivoted thereto, the pendulous lever c having its upper end pivoted to said head to swing at right angles thereto, and the saw connected with the lower end of said lever. 2nd. In a drag saw, the combination of two struts resting on the ground and connected at their upper ends by a cross-bar provided with a head capable of lateral swinging adjustment, and a supporting brace or third strut resting upon the ground or log, with a suspended pendulous lever pivoted to the head and constructed in two parts, one of which is adjustably secured to the other and connected with the saw and provided with an operating handle. 3rd. In a drag saw, the combination, with a supporting frame, of a suspended pendulous lever pivoted at its upper end and capable of a lateral swinging adjustment for varying the plane of oscillation of the saw. 4th. In combination with the supporting frame of a sawing machine, and the pendulous lever C, the pivoted head a and set screw for adjusting the plane of oscillation of the lever. 5th. In combination with the supporting frame and the movable head, the pendulous saw lever c composed of two sections c₁ arranged to slide one upon the other, the two yokes *y₁ y₂*, one secured to each of the lever sections c₁ and embracing and guiding the other section, and the set screw s² passing through one of the yokes and adapted to bind parts of the saw lever together. 6th. The combination, with the pendulous saw lever c and the saw pitman D, having a pivotal connection with the lever end of said lever, of the horizontal operating handle E, adjustably connected with the pitman by a pivot arranged in front of and beneath the pivotal connection of the saw pitman and lever. 7th. In combination with the pendulous saw lever, the pitman D, provided with spaced perforations *o*, in front of and in line with its pivoted connection, and the bifurcated handle E, adapted to be adjustably connected with the pitman by a removable bolt or pin passed through said apertures. 8th. The combination, with a pendulous saw lever c and a saw pitman D, having a series of spaced transverse holes *o*, of the cleats *d* attached to the pitman and pivoted to the lower end of the saw lever and also provided with spaced holes, and the bifurcated horizontal handle E embracing the said cleats and adapted to be adjustably connected therewith by a transverse removable bolt or pin. 9th. The combination of the saw pitman D, the dog R pivoted thereto, the yoke *y*, the set screws *s*, the pin *p* and the saw F having end notches *n n* into which the said dog and pin are adapted to be secured. 10th. The combination, with the saw F having notches *n n* and the pitman provided with yoke and set screw, of the dog R pivoted to the pitman and operating in conjunction with pin *p* to retain the saw removably. 11th. The combination, with the brace D, of the slotted plate G, pivoted to lugs *e e*, and secured by bolts R R¹.

No. 12,258. Process of Improving the Colour and Quality of Leaf Tobacco.

(*Procédé pour améliorer la couleur et la qualité du tabac en feuille.*)

The Louisville Leaf Tobacco Company, (Assignee of Goldsborough Robinson), Louisville, Ky., U. S., 22nd January, 1881; for 5 years.

Claim.—The process of heating leaf tobacco for improving the colour and quality, which consists in immersing the tobacco in alcohol and then drying the same.

No. 12,259. Improvement on Electric Lamps.

(*Perfectionnements aux lampes électriques.*)

Charles J. Van Depoele, Detroit, Mich., U. S., 22nd January, 1881; for 5 years.

Claim.—1st. In a vibrating electric lamp, a spring supporting the lower carbon so constructed that the weight of the upper carbon will depress said spring and break contact with the contact E, and allow the electric current to flow through the carbon points and through the electric magnet D₁ holding down the spring C as long as the current is flowing, said spring being raised in contact with E by the removal of the upper carbon or by the relief to said spring of the weight of said upper carbon, and the consequent break of circuit, allowing the current to pass to the next lamp. 2nd. In a vibrating electric lamp the means of cutting out of circuit, one or more lamps without effecting the others in the circuit, and of automatically re-establishing the current through said lamp or lamps as before, such means consisting of the weight of the upper carbon, in combination with the electric-magnet D₁ and their connections. 3rd. In a vibrating electric

lamp, an electro-magnet producing the vibrations of carbons worked independently from the main or light giving current or circuit, by a separate or derived current, thereby securing an isochronic vibration in all the lamps in the circuit and rendering the same all of equal power, the vibrations being unaffected by the main circuit. 4th. A vibrating electric lamp wherein the vibrations are constant in any number of lamps placed in circuit and obtained from a separate or derived current and independent of the main circuit. 5th. A vibrating electric lamp wherein the main light giving current is passed through the carbon points, and the vibrations are maintained by means of a separate or derived current circulating through properly placed electro-magnets, or wherein the vibrations are maintained by other equivalent means. 6th. An electric lamp wherein either of the carbons is fed or advanced by the action of, or under the influence of rapid vibrations, such vibrations being produced independent of the main light giving current. 7th. An electric lamp wherein the upper carbon point is held up by magnetism and fed by vibrations. 8th. An electro-magnet, the action of which is produced without interrupting the main current through said magnet by breaking the circuit, to magnetize and demagnetize the core of such magnet by a shorter conductor, in proper contact at proper time, whereby the magnet coils remain in permanent connection with the main circuit, and whereby the current is allowed to flow through said short circuit when necessary to produce the demagnetization of the magnetic core, said short circuit being withdrawn from the current when the coils become magnetic.

No. 12,260. Improvements on Dynamo-Electric Machines.

(*Perfectionnements aux machines électro-dynamiques.*)

Charles J. Van Depoele, Detroit, Mich., U. S., 22nd January, 1881; for 5 years.

Claim.—1st. In dynamo-electric machines, and upper and lower field of small magnets A having each a separate core in combination with an armature whose iron bars do not touch at their edges. 2nd. The combination with the two diametrically arranged series of magnets A, having sections C forming top and bottom of the case, of the side B having, in their neutral line, projections carrying bearings E together with a revolving armature arranged in said bearings. 3rd. The revolving armature F consisting of the bands b attached to shaft A by hubs d, and the bars c attached to bands b, and wound with wire in sections.

No. 12,261. Improvements on Cartridge Belt Fabrics and Looms for Weaving the Same.

(*Perfectionnements aux tissus à ceintures de cartouchières et aux métiers pour les tisser.*)

Anson Mills, Washington, D. C., U. S., 22nd January, 1881; for 5 years.

Claim.—1st. A woven cartridge belt composed of a double fabric woven with timbles or pockets on one thickness of the fabric which extends only partly across the fabric, leaving at each edge a selvage composed of the full thickness of the double fabric. 2nd. A cartridge belt fabric composed of a double fabric having tubular, or tubular and corded selvages and woven with timbles on one thickness of and extending only partly across the fabric. 3rd. The combination, with the cloth and warp beams and the automatic intermittently operating cloth beam take up, of a loop or thimble take up provided with needles or retaining points extending down from above into the warp and operating at the times, the said cloth beam take up is inactive to take up the loop or thimble fabric. 4th. The vibratory or rising and falling thimble take-up arranged above the warp with needles or retaining points extending down into the same, in combination with the cloth and warp beams and the automatic intermittently operating cloth beam take up. 5th. The combination of the cloth beam and its intermittently take up, the loop or thimble take-up, the thimble warp beam and its let off and the main fabric warp beam and its positive let off, these elements being combined for joint operation.

No. 12,262. Machine for Edging Sheet Metal.

(*Machine pour ébarber les feuilles de métal.*)

James E. Tyler, Orange Court House, Va., U. S., 25th January, 1881; for 5 years.

Claim.—1st. In a metal edging machine, the combination of the spring gripping plates arranged to slide in guides, with suitable means for reciprocating them, the edge of one gripping plate being bent to overlap the edge of the other plate, and a presser bar arranged relatively to the jaws of the presser-plates to bend the plate over as it is drawn beneath it. 2nd. In a machine for bending the edges of sheet metal to form a double fold, the combination of the spring reciprocating gripping plates, a presser bar arranged above the same and a rotary cam or bending plate arranged relatively to each other so that the bending plate will encircle and pass beneath the edges of the gripping jaws, to turn the second fold in the metal plate. 3rd. In a machine for edging sheet metal, the combination of the gripping plates C E hinged together and provided with suitable means for reciprocating them, the presser spring G, the presser bar H and the cam plate I and lever K for operating it to compress the spring plates and relieve the work.

No. 12,263. Improvements on Steam Boiler Furnaces.

(*Perfectionnements aux fourneaux des chaudières à vapeur.*)

Charles F. Pike, Providence, R.I., U. S., 25th January, 1881; for 5 years.

Claim.—1st. The furnace containing the following elements, constructed and arranged as follows, to wit, outer walls, a grate, perforated, inner walls affording side grate surface, an air space between said walls communicating with pipes for the forcible induction of atmospheric oxygen, a front brick arch extending to or near the central portion of the fire-box, and a rear brick arch which overlaps the front arch to afford between their coincident surfaces a combustion flue, whereby the volume of flame, gas and air from all parts of the fire bed is concentrated centrally at the mouth of the combustion flue, the admixture of gas and air assured by reason of said central concentration above the fire bed, and combustion of the gases assured in their passage through the flue and above the arches. 2nd. A boiler furnace walled in part by the flue sheet and the crown sheet of the boiler, provided with a