

10th. The combination, with the sides provided with the mortises and lock plates, of the notched floor beams having locks. 11th. The improved anchor posts, composed of the extend base and the screw rod provided with a nut or nuts. 12th. The described anchor posts, composed of the extended base and screw rods having a nut or nuts, and provided with a loose pipe encircling screw rod a part of its length.

No. 14,734. Improvements on Mowing Machines. (*Perfectionnements aux faucheuses.*)

Alexander Gordon and Daniel De Garmo, Rochester, N. Y., U. S., 6th May, 1882; for 5 years.

Claim.—1st. The combination of the casting E provided with the loop b, the stay bar H passing through the loop, pivoted at one end to the casting, and at the other to the main frame, and the lever G attached to the loop of the casting, and provided with means for holding it at any adjustment. 2nd. The combination, with the finger beam D and the adjustable casting E, of the hook L pivoted to the casting and operated by a hoisting chain, said hook engaging with a stud s for raising the finger beam.

No. 14,735. Improvements on Sap Evaporators. (*Perfectionnements aux appareils évaporatoires de l'eau d'étable.*)

Philo S. Ewins, West Berkshire, Vt., U. S., 6th May, 1882; for 5 years.

Claim.—1st. The combination, with a furnace having over its front wall a smoke box provided with a smoke exit, of an evaporating pan provided with a number of flues, and a sub-chamber or receptacle arranged across its back or rear end, and a deflector to cause the products of combustion to be carried beyond the rear ends of said flues, before passing into the same. 2nd. The combination, with a furnace, having over its front wall, a smoke box provided with a smoke exit, of an evaporating pan provided with a number of flues traversing its length and having a heater or sub-chamber arranged at its back, and a deflector to cause the products of combustion to be carried beyond the rear ends of said flues, and be directed against the bottom of the heater, or sub-chamber before entering the flues in said evaporating pan. 3rd. The combination, with a furnace having over its front wall a smoke box provided with a sliding register damper and a smoke exit, of an evaporating pan having a number of internal smoke flues. 4th. The combination, with a furnace having over its front wall a smoke box provided with a damper in its bottom, communicating with the fire box, and a smoke exit, of an evaporating pan, having a number of internal smoke flues and provided with a damper to close the rear end of said smoke flues. 5th. The combination, with the evaporating pan, divided longitudinally into the syrup compartment and the sections, the latter provided each with an internal smoke flue, of the damper O made in two parts. 6th. The combination, with the evaporating pan, divided longitudinally into the syrup compartment and the sections, the latter provided, each with an internal smoke flue, of the guard P. 7th. The combination, with the evaporating pan having the internal smoke flues, of the smoke box provided with the connecting pipes h. 8th. The evaporating pan divided longitudinally into the syrup compartment provided with the gate f, and the sections F having the openings e, and the sap heater arranged transversely at the back of the evaporating pan, and provided with the spout d and gate S.

No. 14,736. Improvements on Walking Sticks. (*Perfectionnements aux cannes.*)

John Draper, Whitby, Ont., 6th May, 1882; for 5 years.

Claim.—1st. In combination with a walking stick A, a metallic case C containing a lamp H and provided with a glass E, the said case being provided with suitable ventilating holes arranged to admit the passage of air through the case, while protecting the lamp from sudden gusts of wind. 2d. A walking stick having a metallic lamp case in it, an outer casing J encircling the tube I containing the lamp, and forming an air space through which the air passes into the lamp, in combination with the vertical wings M and circular flange L, arranged around the casing J for the purpose of protecting the air openings. 3rd. In a walking stick having a metallic lamp case inserted in it, the combination of a cone-shaped top F situated within the case, immediately below the top G, and forming an air space.

No. 14,737. Improvements in Magazine Fire-Arms. (*Perfectionnements aux armes à feu à coups multiples.*)

Alois Schneider, San Francisco, Cal., U. S., 6th May, 1882; for 5 years.

Claim.—1st. In a magazine gun, a vertically moving breech block provided with a downwardly projecting leg, and the forward wall of the frame, and provided with a lug F and adapted to bind against the forward wall of the frame, and steady the breech block when the breech is closed. 2nd. The rear wall of the frame, provided with a vertical slot and vertical inserted spring I, in combination with the pivoted guide bar J, and vertically moving breech block C. 3rd. The vertically moving breech block C, having the shell extractor moving in a chamber on one side of the breech block opening, and the cocking arm upon the opposite side, in combination with the actuating head D, of the lever, having a single supplemental pin K extending through from side to side, so as to operate both the cocking arm and to start the extractor. 4th. In combination, with the frame provided with a groove in which moves the head of the extractor, the slide L connected with and moved by the hammer in its fall, so as to close the end of said groove in the frame, into which the head of the extractor moves to seize cartridges. 5th. The rotating cartridge locking rod P, having a projection at the end of which it may be turned, in combination with the lug R pivoted at 3 to the forward part of head D, so that the travel of its projecting spur 5 is past the projection on the end of rod P and adapted to be thrown down and kept from operating the rod.

No. 14,738. Improvements on Hoop Splint Machines. (*Perfectionnements aux machines à effiler les cercles.*)

Henry F. Campbell, Concord, N. H., U. S., 6th May, 1882; for 5 years.

Claim.—1st. The table or bed to support the hoop-pole, and a band saw to cut the same combined with an elastic surfaced roller in which to imbed the knots, warts and short crooks of the hoop-pole, and with a suitable presser to keep the hoop-pole pressed against the said elastic surfaced roller. 2nd. The table D, the anti-friction balls d arranged therein, the edge rollers e f and the rollers g o. 3rd. The described method or process of producing hoop splints which are to retain the natural bark, which consists in imbedding the knots, warts and short crooks of that part of the hoop-pole to be contained in the splint, then being produced into the substance of an elastic roller against which the hoop-pole is pressed, and sawing the said splint from the pole parallel with the centre of the pole, whatever may be its curvature.

No. 14,739. Improvements on Feed Water Heaters. (*Perfectionnements aux chauffeurs d'alimentation.*)

John H. Turner, Fort Wayne, Ind., U. S., 6th May, 1882; for 5 years.

Claim.—The combination of the cylindrical tank A, surrounding shell B with the pipes C E F G, the condensing tank H having spray plate K and diaphragm L provided with V-shaped perforations, the overflow pipe N and pipe I.

No. 14,740. Improvements on Vapour Burners. (*Perfectionnements aux becs à gaz.*)

Albert H. Watkins, Boston, Mass., U. S., 6th May, 1882; for 5 years.

Claim.—1st. The combination, with a mixing chamber, of the flaring rings C C having their upper portions farther apart than their lower portions. 2nd. The combination, with mixing chamber B and flaring rings C, of the removable tip A, adapted to be held in place by the set screw D. 3rd. The generator E provided with air holes H, regulating screw G, mixing chamber B, tip A and flaring rings C C.

No. 14,741. Improvements on Vehicle Springs. (*Perfectionnements aux ressorts des voitures.*)

Harry S. Clark, Towanda, Penn., U. S., 6th May, 1882; for 5 years.

Claim.—The combination, with two pairs of oblique quarter springs H, bolted or clipped diagonally across the separate front and rear bars B, of two transverse half elliptic springs F, arranged in front and rear, and the diagonal or ball couplings G, whereby the ends of the quarter springs are suspended from the ends of the half springs.

No. 14,742. Improvements on Wood Drying Apparatus. (*Perfectionnements aux sécheries à bois.*)

David F. Noyes, Lewiston, Me., U. S., 6th May, 1882; for 5 years.

Claim.—1st. A metal platen formed of top, bottom and side plates, and a fold or a series of folds of piping. 2nd. A series of platens provided with studs, and by means of links adapted to be suspended in horizontal planes, one beneath the other. 3rd. A series of platens provided with a fold, or a series of folds of piping, and a series of pipes connecting the platens together. 4th. A series of platens, provided with means for their suspension in horizontal planes beneath each other, and having a fold, or series of folds, of piping provided with connecting pipes between the platens.

No. 14,743. Improvements on Bustles. (*Perfectionnements aux tournures.*)

James Stuart, (Assignee of Austin Kelley,) Brooklyn, N. Y., U. S., 6th May, 1882; for 5 years.

Claim.—1st. The series of springs D formed in loops extending up and down, with flexible material B serving to connect and aiding to hold the several springs in position. 2nd. The adjustable bustle described having spring hooks or analogous fastenings G, connected at or near the lower end, in combination with eyelets or eyes I J arranged in two or more series. 3rd. The springs D formed in vertical loops by means of fastenings G, engaging with eyes I J on the inner face of the structure, and having the lower end of the springs extended beyond the fastenings, so as to hold the several springs in the form of an Arabic numeral 6. 4th. The spring loops D, fastenings G I J, fabric B and waist band A, with the upper end of the springs adjacent to the waistband, curved outward so that each spring forms a curve inward at the lower end, and outward at the upper end. 5th. The two armed fastenings G attached to the spring D, in combination with a series of eyelets or analogous pockets I J and arranged to engage by its arms in two of the said eyelets or pockets and to hold the terminal portion of the spring firmly in a position nearly parallel to a portion of the same spring, at the desired higher level.

No. 14,744. Improvements on Machines for Manufacturing Barbed Metal Fence Strips. (*Perfectionnements aux machines pour faire les bandes métalliques barbelées pour les clôtures.*)

Thomas C. Hewitt, (Assignee of Joseph F. Walmsley,) London, Ont., 6th May, 1882; for 5 years.

Claim.—1st. A pair of revolving disks F G, the upper one F being keyed to shaft D, in adjustable journal B controlled by screw H, said disk having reciprocal motion communicated to them by ordinary spur gear I J or equivalent device. 2nd. In combination with the