No. 24,632. Lamp Burner. (*Bec de Lampe.*)

William McMullen, Toronto Ont., 3rd August, 1886; 5 years.

Claim.—1st. In a lamp burner, a central tube having a closed bottom, in combination with walls to support the central tube within the outer wick-tube, and forming two passageways opposite to each other, leading from the interior of the central tube to the exterior of the outer wick-tube. 2nd In a lamp burner, a central tube A having a closed bottom *a*, and suspended within the wick-tube C by the walls *d* of the passageways D, in combination with a circular wick F having legs *f*, to extend past the walls *d*, substantially as and for the purpose specified. 3rd. In a lamp burner, a central tube A having a closed bottom *a*, and suspended within the wick tube C by the walls *d* of the passageways D, in combination with a circular wick F having legs *f*, to extend past the walls *d*, the rack G, formed as specified, and operated by the ratchet-wheel H, substantially as and for the purpose specified. 4th. In a lamp burner, a central tube A having a closed bottom *a*, in combination with a detachable spindle I provided with a perforated disc K, substantially as and for the purpose specified. 5th. In a lamp burner, the combination of a wick L hung on the bar *g* attached to the bottom *a*, substantially as and for the purpose specified.

No. 24,633. Buckle. (*Boucle.*)

Clark W. Wheeler and John Kressin, Kenosha, Wis., U. S., 3rd August, 1886; 5 years.

Claim.—1st. The combination, in a buckle, of the section A having its sides upwardly inclined at one end and provided with cross-bars *c* and *e*, and a section B having its sides upwardly inclined at the opposite end, and provided with cross-bars *b* and *d*, the curved sides of each of said sections being arranged to engage with the other section, and when draft is applied to the trace to draw said cross-bars *b* and *c* toward said cross-bars *d* and *e*, and clamp said trace at different points between them, substantially as and for the purposes set forth. 2nd. The combination, in a buckle, of the section A upwardly or outwardly curved at its front end, and provided with cross-bars *c* and *e* and depending tongue *f*, and the section B, upwardly or outwardly curved at its rear end and provided with the cross-bars *b* and *d*, and the lateral projections *a*, *a*, substantially as and for the purposes set forth

No. 24,634. End Gate for Waggon Boxes. (*Hoyon de Wagon.*)

Thomas Thomson and Owen Bean, Berlin, Ont., 3rd August, 1886; 5 years.

Claim.—An end gate having pieces *a*, *a*, end rods *d*, *d*, keys *i*, *i*, piece *b*, hinges *h*, *h*, spring *e* and catch *f*, arranged and combined substantially as and for the purposes hereinbefore set forth.

No. 24,635. Automatic Guard for Railroad Cars. (*Garde Automatique pour Chars de Chemins de Fer.*)

John W. Anderson, (assignee of Robert J. Gillham,) Orlando, Fla., U.S., 3rd August, 1886; 5 years.

Claim.—1st. The herein-described guard pivotally supported, and having its heavier portion in rear of its pivot extended and adapted to overbalance the forward portion, said rear portion being shaped substantially as described, forming an incline between which and the top of the car, the air will operate with a wedging action, whereby to lift said end in order that the air may escape rearwardly, substantially as set forth 2nd. The combination of two adjacent cars, and guards secured on and near the meeting ends of said cars, one of said guards opening toward the meeting ends of the car, whereby to receive the cinders and like, and the other being inclined upward from its inner to its outer edge, substantially as and for the purpose specified.

No. 24,636. Harvester and Binder. (*Moissonneuse-Lieuse.*)

The Massey Manufacturing Company, Toronto, Ont., (assignee of William N. Whitely, Springfield, Ohio, U.S.,) 3rd August, 1886; 5 years.

Claim.—1st. A single wheel side and rear cut reaping machine provided with a drag-bar C, ratchet lever U1 and conveyor platform *b*, combined with a shoe C_4, the post C_3 attached to an extension of said shoe, a revolving reel R supported on said post, and the binding mechanism also supported by said post, substantially as and for the purpose set forth. 2nd The drag-bar C, shoe C_4, post C_3 attached to an extension of said shoe, the binding mechanism supported by said post, and the conveyor-platform *b* supported at its inner end by said shoe, combined with the miter gear *n1*, tumbling-shaft *u* having the universal joint *p* and the clutch E, substantially as and for the purpose specified. 3rd. A binder-table b^1, provided with a lever *d*, combined with a connecting rod d^1, spring *f*, clutch E, and stop-lug p^1 projecting from the binder-arm *e*, as and for the purpose specified. 4th. A bundle-compressor composed of the curved binder-arm *e* secured to the shaft e^1, and provided with the slotted arm e^2, and the compressor-arm *f* provided with the arm f^2 engaging with, and operated by the slot in the arm e^2, in combination with the shaft h^5 provided with the crank *h*, the crank-arm e^3 on the shaft e^1, and the connecting-link *i*, substantially as and for the purpose set forth.

No. 24,637. Artificial Fly. (*Mouche Artificielle.*)

Charles F. Imbrie, Jersey City, (assignee of Wakeman Holberton, Hackensack,) N.J., U.S., 3rd August, 1886, 15 years.

Claim.—1st. In an artificial fly or fly-hook, the combination, with the hook proper, of an attached imitation fly having its parts which correspond to the wings of the insect arranged to project, inclining backward in an outward direction, and to occupy an oblique position relatively to the forward end of the hook, substantially as and for the purposes specified 2nd In an artificial fly or fly-hook, the combination, with the hook proper, of an attached imitation fly, having its exterior flexible members arranged to stand out from the hook, and to incline backward in an outward direction relatively to the forward end of the hook on different sides of the said hook, substantially as shown and described.

No. 24,638. Waggon Gearing. (*Train de Voiture.*)

Peter J. Richter and Lola M. Ross, Bay City, Mich., U. S., 3rd August, 1886; 5 years.

Claim.—1st. In a waggon gearing, the combination, with the body *d*, the levers *b* and b_1 secured respectively to the rear axle and the bolster, and provided with the upturned portions *h* and h_1, and a horizontal spring placed between and connected with the said portions *h*, and h_1, of the supporting parts *f*, extending upward from the central portion of the said levers, and provided with a rounded portion *g*, the piece *i* secured to the under side of the body, and provided with a saddle *j* fitting over, and resting upon the portion *g*, and having the ear pieces *k* extending downward on each side of, and pivoted to the part *f* substantially as and for the purpose set forth. 2nd. In a waggon gearing, the combination, with the levers *b* and b_1, supporting the body and having the upturned ends *h* and h_1, and a horizontal spring *m* within the body, and with its outer ends pivoted to the said ends *h* and h_1, of the supporting braces *r* having their upper ends secured to the central portion of the said spring, and their opposite ends secured to the body sill, substantially as and for the purpose herein set forth. 3rd. In a waggon gearing, the combination, with the levers *b* secured to the rear axle, and having the upturned ends *h*, provided with the openings *e*, the levers b_1 secured to the bolster and provided with the upturned ends h_1, and having the openings *e*, the body *d* pivotally connected with, and supported by the said levers, of the curved spring pieces g_1 and g_1 secured together at their central portions, and the pieces *h* secured to the projecting ends of the spring pieces, and having the projecting lugs e_1 passed through the said openings *e*, substantially as and for the purpose set forth. 4th. In a waggon gearing, the combination, with the front axle having the thills rigidly attached thereto, of a journal k_1 in the central portion of the axle, and provided with screw-threads on its opposite ends, and with the nuts *m* passed upon the threads, the two partbox *n* resting upon the journal and provided with a circular portion n_1 and the bolster plate *p*, substantially as and for the purpose herein set forth

No. 24,639. Button Shoe. (*Soulier Boutonné.*)

Otis D. Randall, Austin, and Charles N. Bishop, Chicago, Ill., U. S., 3rd August, 1886; 5 years.

Claim.—A shoe constructed with a foxing, consisting of the parts B, B_1, the part B forming the portion of the foxing on the outer side of the shoe, and the part B_1, the main portion of the foxing on the opposite side, and with the overlapping button flap D attached to the part B on a front central line, substantially as shown, provided with button-holes and adapted to button upon the inner side of the shoe to the portion B, substantially as described.

No. 24,640. Railway Signal. (*Signal de Chemin de Fer.*)

John A. Leonard, Glenvale, Thomas M. Clark, George A. McGowan and John T. McMahon, Kingston, Ont., 3rd August, 1886; 5 years.

Claim —1st. The combination, with the rail G, of frame A, levers H, I, pulley F and chain L for operating a bell, as set forth. 2nd. The combination of the levers H, I, chain L, pulley F and a supporting frame A, to operate as set forth, for the purpose described.

No. 24,641. Goose Neck or Tongue Coupling Arrangement for use upon Street Cars, etc. (*Col de Cygne ou Armon pour Chars Urbains, etc.*)

James H. Whitelay Arlington, and Thomas McKenzie, Jr., Baltimore, Md., U S., 3rd August, 1886, 5 years.

Claim —The improvement to the goose neck or coupling arrangement by the addition or extension of a hanger in a curved shape, like the letter J, from under the first curvature, by the continuation of which hanger after curvature a tongue or pole rest is formed, and for the combination thus made by which a goose neck or coupling arrangement and a tongue or pole rest are formed out of a single piece of metal.

No. 24,642. Spring Tooth Harrow. (*Herse à Dents Elastiques.*)

Daniel McKenzie and George Reid, Reese, Mich., U S., 3rd August, 1886; 5 years.

Claim.—1st. The combination of a bar, a bracket bolted directly thereto and extending upwardly therefrom, a tooth pivotally connected to the upper free end of the bracket, a curved spring rigidly clamped at one end between the cross-bar and bracket, and a loop loosely connected to the free end of the spring and embracing the tooth, substantially as described. 2nd. The combination of a cross-bar, a bracket bolted thereto, and having perforated ears or lugs at its free end, a tooth pivoted to the lugs of the bracket, a curved spring rigidly held in place between the bracket and cross-bar, and having the flanges *e* at its free end, and a link F pivoted in the free end of the spring and embracing the tooth, substantially as described. 3rd. The combination of a cross-bar, a bracket bolted thereto, an elastic packing seated in a recess of the cross-bar, a tooth pivoted to the bracket, and a spring having one end interposed between, and