

No. 11,835. Improvements on the Manufacture of Wheels. (*Perfectionnements dans la fabrication des roues.*)

William Newlin, Attica, Ind., U. S., 30th September, 1880; for 5 years.

Claim.—1st. The combination of a metallic hub having recesses to receive the end of the spokes, with a metallic tire having recesses to receive the other ends of said spokes, which are entered therein by the contraction of the said tire after heating. 2nd. The metallic tire provided, along its inner circumference, with recesses to receive the outer ends of the spokes. 3rd. In securing the spokes in the upper series of holes in the hub, then dropping the heated and expanded tire around the spokes and in line with the centre of the hub, next subjecting the hub to pressure so as to cause it to pass the centre of the tire, and finally fitting a second series of spokes in the hub and the expanded tire and removing pressure from the hub. 4th. A metallic hub and metallic tire, and spokes adjusted in recesses in said hub and tire, and retained in position by shrinking the latter.

No. 11,836. Improvements in Shoe Lace Hooks. (*Perfectionnements aux crochets pour lacer les chaussures.*)

Mellen Bray, Newton, Mass., U.S., 30th September, 1880; for 15 years.

Claim.—1st. A shoe lace hook or stud composed of two discs connected at one side by a neck made in one piece, and a tubular rivet made in a separate piece and united thereto, to form the shank by which the hook may be attached to a shoe or other article. 2nd. A shoe lace stud or hook composed of two discs united by an eccentrically located neck made oval in cross section or having its edges rounded, all in one piece, and a tubular rivet made separate and united to one of said discs to form the shank, by which the hook may be securely attached to the shoe or other article. 3rd. A tubular rivet attached to the hook head by inserting its shank through a hole therein and upsetting the tubular shank of said rivet, to throw out a bead-lip or fin beneath said hook head.

No. 11,837. Improvements on Boat Seats. (*Perfectionnements aux sièges des bateaux.*)

Andrew McFarren, jr., and Charles Field, Toronto, Ont., 30th September, 1880; for 5 years.

Claim.—A seat A secured to the metal frame B which support the rollers C D, in combination with the guide plates or slides E.

No. 11,838. Improvements in Car-Couplings. (*Perfectionnements aux attelages des chars.*)

Marion W. McCann, Dublin, Ind., U.S., 30th September, 1880; for 5 years.

Claim.—1st. The combination, with coupling pin *d*, of the levers *e e* pivoted thereto and provided with spring or springs, for forcing the pin quickly in position to couple the cars. 2nd. The combination of the pin *d*, levers *e e*, connecting rods *h h* and springs *k*. 3rd. The combination of levers *e e*, connecting rods *h h*, springs *k*, pin *d*, spring *a*, stop bolt *e* and draw head *B*.

No. 11,839. Improvements on Milk Creamers. (*Perfectionnements aux garde-lait.*)

Peter H. McIntosh, L'Orignal, Ont., 30th September, 1880; for 5 years.

Claim.—The cylinder B.

No. 11,840. Improvements on Straw-Cutters. (*Perfectionnements aux hache-paille.*)

David Maxwell, Paris, Ont., 2nd October, 1880; (Extension of Patent No. 5,234).

No. 11,841. Process and Apparatus for Casting Leads. (*Procédé et appareil pour couler les blancs et les interligues.*)

John Fleming, Toronto, Ont., 2nd October, 1880; (Extension of Patent No. 11,267).

No. 11,482. Process and Apparatus for Casting Leads. (*Procédé et appareil pour couler les blancs et les interligues.*)

John Fleming, Toronto, Ont., 2nd October, 1880; (Extension of Patent No. 11,267).

No. 11,843. Improvements on Straw-Cutters. (*Perfectionnements aux hache-paille.*)

Henry S. Havill, Paris, Ont., (Assignee of William Barrett, Sedalia, Mo., U.S.), 4th October, 1880; for 5 years.

Claim.—1st. A cutting box A provided with a press board B, and a stationary cutting bar I, in combination with a triangular knife C fastened to the bar D. 2nd. A sickle-shaped handle K pivoted at a to the bar D, in combination with the link L pivoted to the post M. 3rd. A triangular movable knife C working in connection with a stationary cutting bar I, in combination with the bar H and guide bar J.

No. 11,844. Improvements in Cooking Ranges. (*Perfectionnements aux landiers de cuisine.*)

George R. Prowse, Montreal, Que., 4th October, 1880; for 5 years.

Claim.—1st. The chamber H, in combination with the hook K pivoted thereto and having gridiron F, the whole arranged in connection with the fireplace. 2nd. The chamber H, in combination with the hook K provided with gridiron F and swinging cover d, the whole arranged in connection with the fireplace.

No. 11,845. Improvements in Mail Bags. (*Perfectionnements aux valises à lettres.*)

Charles J. Becketl and Frank M. Horner, Mimico, Ind., U. S., 4th October, 1880; for 5 years.

Claim.—1st. A mail bag having a central opening and two side projections adapted to fold and close over each other and secured by a staple passing through such folded sides. 2nd. A mail bag having the projection the central projections of which are closed and folded by closing and folding the side projection. 3rd. A mail bag having two sides and two rear fastening ears, the side ears being provided with double eyelets passing over a single central staple, and the rear ears folding over the side ears and passing over the same central staple. 4th. A mail bag provided with two side and rear projections, and having a tag holder located between the rear projections in such manner that, when the projections are folded, the tag holder is on the front of the bag. 5th. The eyelet *c* made in two pieces or plates *c₁* *c₂* having tongues *c₃* *c₄*, adapted to turn over each opposite plate and be secured thereto and to the mail bag. 6th. The combination of the side ears B, rear ears D, staple H and eyelets F G.

No. 11,846. Improvements on Fanning Mills. (*Perfectionnements aux tarares-cribleurs.*)

George Brooks, Detroit, Mich., U. S., 4th October, 1880; for 15 years.

Claim.—1st. The combination of the hopper slide D with the lever *a*, link J and lever I. 2nd. A chess board for a fanning mill composed of the screen H and seed board H'. 3rd. The combination of the shoe C having the channels *o p*, with a chess board having the inner face of its front bar inclined and provided with the screen H and opening *n*, and seed board H' with oppositely inclined gutters *m*.

No. 11,847. Improvements on Feeding Apparatus for Steam Boilers. (*Perfectionnements aux appareils d'alimentation des chaudières à vapeur.*)

Sally G. Cohnfeld, Dresden, Germany, (Assignee of Nicolas Yagu, St. Petersburg, Russia), 4th October, 1880; (Extension of Patent No. 5,257).

No. 11,848. Improvements on Steam and other Cocks and Valves. (*Perfectionnements aux robinets et aux soupapes de vapeur et autres.*)

James Mallinson, Welwyn, Eng., 9th October, 1880; (Extension of Patent No. 5,419).

No. 11,849. Improvements on Gas and Air Engines. (*Perfectionnements aux machines à gaz et à air.*)

Charles W. King and Alfred Cliff, London, Eng., 9th October, 1880; for 5 years.

Claim.—1st. A main working cylinder receiver with displacer and regenerator, and a compressing pump. 2nd. A motive power engine driven by internal combustion of the fuel in which, between the working cylinder and the place where combustion occurs, there is at all times free communication from one to another as far as pressure is concerned, but a large surface regenerator is interposed so that the cylinder cannot be unduly heated by the combuston. 3rd. Exploding or burning a mixture of gas and air at one end of a receiver, provided with a regenerator, and in which a displacing piston or plunger works, when such gas and air enter together and are already mixed before their introduction, or during their introduction into the receiver. 4th. Using a displacing plunger and regenerator to increase the pressure during the forward stroke and diminish it during the backward stroke in engines driven by internal combustion of the fuel, when there is at all times free communication for pressure between the receiver in which these work and the working cylinder.

No. 11,850. Improvements on Grain Car Doors. (*Perfectionnements aux portes des chars à grain.*)

Thomas Hibbert, Cochran, Ind., U.S., 9th October, 1880; for 5 years.

Claim.—The combination, with the entrance *a*, door B and upright C, of the hinge plate D having the stop *n* and pivoted at one end to the door, and at the other to said upright, the guide D' secured to the floor of the car and to the upright and engaged by the said pin, and the flanged stop or guard G having a fastening.

No. 11,851. Improvements in Oil Stoves. (*Perfectionnements aux poêles à huile.*)

David E. Bangs, Medford, Mass., U.S., 9th October, 1880; for 5 years.

Claim.—1st. The combination, in a vapour burning stove, of the plate A and cone B erected thereon, the burner tube d having trough *d₁* on its upper side, and the perforations *i*, the pipes E E' on the outside of the cone and communicating with each other, and the gas receiver F communicating at one end with the pipe d and at the other with pipe E, the pipes E E' F being in the smoke passage of the stove or furnace, and the pipe F being above the pipes E E'. 2nd. The combination, in a vapour burner for stoves of the cone plate A, the burner tube d below the same, and the oil tube E' above said plate and in contact with the outside of the cone wall *a*. 3rd. A vapour burner for stoves or furnaces consisting of the plate A, a tube d under the said plate and attached thereto and provided with the trough *d₁*, and perforations *i* in the bottom of said trough, and the cone B formed on the plate A and having a swinging side piece *b*.

No. 11,852. Improvements on Velocipedes. (*Perfectionnements aux vélocipèdes.*)

George W. Preasey and Edwin L. Crowell, Hammonton, N. J., U. S., 9th October, 1880; for 5 years.

Claim.—1st. The bicycle having a front steering wheel B, a hind driving