

No. 11,783. Composition for Cleaning Steam Boilers and Preventing Incrustation of the same. (*Composé pour empêcher les incrustations dans les chaudières à vapeur et les nettoyer.*)

Fulton Henderson, Toledo, Ohio, U. S., 17th September, 1880; for 5 years.

Claim.—The combination of linseed oil, coal-tar and red lead.

No. 11,784. Improvements on Flour Bolting Machines. (*Perfectionnements aux machines à bluter la farine.*)

Lewis Baxter, Brantford, Ont., 20th September, 1880; for 5 years.

Claim. 1st. The combination of bolting chest with a purifier under it and connected by shoe *c*, hung on spring *d* and *e*. 2nd. The combination of bolting chest, in two halves or lengths, and holding the framing together by bars *B* hinged at *C*, and screwed rod or chain *D*. 3rd. The application of reel shaft *E* in two halves or lengths supported and stiffened by braces, also conveyor *G* in two halves or pieces, and the cant boards under reel slipping on cleats. 4th. The application of pitch chain *L* passing over wheels *H* I K.

No. 11,785. Improvements on Sugar Washing Process and Apparatus. (*Perfectionnements aux procédés et appareils de lavage du sucre.*)

John V. Booraem, Brooklyn, N.Y., U.S., 20th September, 1880; for 5 years.

Claim.—1st. Rolls *A* and troughs *C* D provided with revolving screws *E* G *G* respectively. 2nd. The combination with the rolls *A*, of the sectional trough *C* provided with screw *E*, guide *F* and troughs *D* D; having outlets *I* I and provided with screws *G* G. 3rd. The trough *C* provided with an adjustable end section *C*. 4th. The combination with the mixing troughs *D* D, of the triangular guide *F*. 5th. The process of washing sugar by passing the sugar with water or other suitable liquid through rolls, thence into series of stirring, incorporating and delivering troughs. 6th. The process of washing sugar by passing the sugar with water or other suitable liquid through rolls thence into series of stirring, incorporating and delivering machines and thence into centrifugal machines.

No. 11,786. Improvements on Rotary Valves. (*Perfectionnement aux soupapes rotatoires.*)

Charles J. McCallum, Warren, Me., U. S., 20th September, 1880; for 5 years.

Claim.—In a rotary valve constructed to make one fourth revolution to each stroke, the combination of the shell, slotted with ports and interposed bars, to give successive intalments of steam during each stroke, and of the transverse partition *g* with the valve seat and ports therein.

No. 11,787. Improvements on Horse Rakes. (*Perfectionnements aux râteliers à cheval.*)

David Maxwell, Paris, Ont., 20th September, 1880; for 5 years.

Claim.—1st. The cone-shaped projection *B* cast upon the hub *A*, or otherwise fastened to the wheel of the machine in combination with a conically dished disk *E* operated by suitable mechanism and connected to the axle *D*. 2nd. The cone-shaped projection *B* cast upon the hub *A*, or otherwise fastened to the wheel of the machine, in combination with a conically dished disk *E* operated by a forked lever *G* pivoted to straps *H*, on the axle *D*, and provided with pins *g* for engaging with the disk *E*.

No. 11,788. Improvements on Car-Couplings. (*Perfectionnements aux attelages des chars.*)

Nathaniel F. Brent and Elias R. Bowen, Chicago, Ill., U. S., 20th September, 1880; for 15 years.

Claim.—1st. The hook *b*, springs *f*, in each draw-head and coupling pins *d* *e*. 2nd. The novel combination of the hook *b* and bearing spring *f* with the reinforcing springs *g* *h*. 3rd. The novel combination of the hook *b*, springs *f* *f* and pins *d* *e* with the push plate *j* or its equivalent. 4th. The draw hook *b* having an extended head provided with a hook or notch and also having an extension or shank *c* arranged with the draw bolts *d* *e* in use to be acted on by springs, to hold it in place and to be acted on by plates *j* or equivalent devices for uncoupling.

No. 11,789. Improvements on Safety Valves. (*Perfectionnements aux soupapes de sûreté.*)

Henry G. Ashton, Somerville, Mass., U. S., 20th September, 1880; for 5 years.

Claim.—1st. The spring *H* supported between the two supports *h* *h*, the lower support *h* pivoted directly upon the centre of the valve and near the level of the ground joint or valve seat, and the upper *h* pivoted directly upon the centre of the adjusting screw, both being free to tilt as the spring requires. 2nd. The combination of shell *A*, bushing *B*, cap *C*, screw *F*, spring *H*, supports *h* *h*, and valve *G*, the screw *F* passing directly through cap *C*, the spring on both pivots being above the level of the ground joint and each of the parts being made and combined together. 3rd. The combination of valve *G* made to extend beyond the ground joint, and the adjustable shell *A* having its inner diameter at *a* smaller than at *a* 2, the overhanging part of the valve fitting the shell at *a*. 4th. The combination of adjustable shell *A*, valve *C* and ring *f*, each of the parts being constructed and arranged with the other, as described.

No. 11,790. Improvements on Tanning Hides and Skins. (*Perfectionnements dans le tannage des peaux.*)

Frederick G. Vedova, Smyrna, Asia Minor, 20th September, 1880; for 15 years.

Claim.—Alternately soaking hides and skins in tannin solutions and sub-

jecting them to a squeezing operation, either by passing them between rollers or by acting upon them by other nipping or stamping mechanism.

No. 11,791. Improvements on Fruit Packages. (*Perfectionnements aux boîtes à fruits.*)

Richard J. Doyle, Owen Sound, Ont., 20th September, 1880; for 5 years.

Claim.—1st. A fruit package composed of parallel sided staves *A* of uniform length placed close together at one end and splayed apart at the top to form tapering interstices, and nailed to exterior hoops *B* *C* *D*, the bottom heading *D* inserted and fixed by hoop *E*, and the cover or top *E* by hoop *F*, the cover having nicks *G* peripherally to pass catches *H* nailed to the staves to project and hold the cover when turned centrifugally. 2nd. The cover *E* having peripheral nicks *G*, in combination with fixed projecting catches *H* nailed to the chain and a supporting hoop *F* nailed to the staves within the package.

No. 11,792. Improvements on Brushes. (*Perfectionnements aux pinceaux.*)

Charles Boeckh, Toronto, Ont., 20th September, 1880; for 5 years.

Claim.—As an improved article of manufacture, a brush provided with bridle holder *C*, soldered or otherwise secured to the band *A* and provided with a bent end *a* for holding a bridle holder.

No. 11,793. Improvements in Bit Stocks. (*Perfectionnements aux vilebrequins.*)

Obad Peck, Rowe, Mass., U.S., 20th September, 1880; for 5 years.

Claim.—1st. The jaw piece *B* and nut *C* combined with the shell *A* having a socket to receive and hold bit-shanks, when said jaw piece has a chisel edge *b* of which the bevel on the side of said edge, in the direction toward which a bit shank moves in entering said socket, makes a greater angle with the line of motion of said shank in entering the same than the bevel on the other side of said edge. 2nd. The jaw piece *B* having one or more bearing in the shell *A* inclined, to guide it inward from the outer end of said shell.

No. 11,794. Improvements in Dyeing Cotton Warps and Cotton Aniline Black, and in Apparatus therefor. (*Perfectionnements dans la teinture de la chaîne de coton et du coton en noir d'aniline, et aux appareils pour cet objet.*)

Ernest Posselt and Rudolph Peters, Bradford, England, (Assignees of Jule J. Leloir, Tourcoing, France), 20th September, 1880; for 5 years.

Claim.—1st. The employment of the mordants for dyeing cotton warps and cotton fabrics. 2nd. The method of dyeing cotton warps or cotton fabrics aniline black, by the employment of shower baths or by admitting the dyeing mixtures in such quantities that the warps or cotton fabrics will imbibe, or nearly imbibe, the mixtures in passing through the cisterns and then keeping the mixture at an equal degree of concentration, by the use of apparatus.

No. 11,795. Improvements in Gas Carbureters. (*Perfectionnements aux carburateurs à gaz.*)

Walter M. Jackson, Providence, R. I., U. S., 20th September, 1880; for 5 years.

Claim. 1st. The process of carburetting gas or air consisting in exposing constantly renewed thin films of volatile hydro-carbon, the supply of which is governed by the evaporating and a non-absorbing surface, to a passing current of gas or air. 2nd. The combination with the carburetter, of a reservoir communicating with the carburetter, and a floating valve constructed to regulate the supply of hydro-carbon to the carburetter. 3rd. The combination with the carburetter *A* and reservoir *B* connected by an aperture, of the valve *k*, float *k* and the tube *m* connecting the carburetter with the reservoir. 4th. The combination, with the carburetter *A* and reservoir *B*, of the union piece *g* provided with the flange to receive the reservoir, and with the tube *h*. 5th. The combination, with the pan *b*, of the cover *c* provided with the partition *d*, and the frames *f* *f* constructed to secure the cover to the pan by means of bolts. 6th. The combination, with a carburetter and a reservoir constructed to supply the carburetter with liquid hydro-carbon automatically, of a tube connecting the two, and arranged to equalize the pressure. 7th. The combination, with the tube *h* having a valve seat at its upper end, of the valve *i* secured to the float *k* constructed to regulate the supply of hydro-carbon to the carburetter. 8th. The combination with a carburetter and a supply vessel, each provided with a cock or valve, of a union joint constructed to connect the supply vessel with the carburetter. 9th. The combination, with the reservoir *B*, of the pipe *n* provided with the cock *m*, the supply vessel *C* with the cocks *o* *p*, and a union piece constructed to connect the supply vessel with the reservoir whilst the carburetter is in operation. 10th. The combination, with the supply vessel constructed to be connected with the reservoir and provided with the cocks *o* *n*, of the pipe *n* extending downward into the reservoir.

No. 11,796. Improvements on Kitchen Implements. (*Perfectionnements aux outils de cuisine.*)

William H. Thayer, Ottawa, Ont., 22nd September, 1880; for 5 years.

Claim. 1st. A kitchen implement consisting of a continuous handle having from the lower portion projections or hooks, suitably arranged for lifting tilting hollow-ware, removing stove covers and for other purposes. 2nd. The circular handle *A* having holes *a*, or suitable projections for the fingers of the operator, horn *B*, lower and upper hooks *C* *D*, and straight pointed hook *E*, relatively arranged with or without the pounder *F*. 3rd. A circular handle *A* having hooks and other projections, suitably arranged for the purposes set forth, the sides of the handle being parallel to lie on a flat surface for adaptation as a stand for flat irons and other similar uses.