

cylinder A, its double row of slats *b b* and intervening chamber *x*, pins *e* and case B, surrounding the lower portion of the cylinder and heated as specified; 3rd. The combination of the slotted cylinder A, revolving in the case B, and appliances for heating the air within said case; 4th. The combination, with the case B and pipes *h*, of the revolving cylinder A provided with one or more brushes; 5th. The described mode of treating pelts, consisting in first shearing the face to cut short the master hairs and then combing out the fine hair or fur; 6th. Subjecting the pelts to the action of a revolving card; 7th. As a new article of manufacture, a dressed pelt in which the master hairs are cut short and the fine hair is combed out to constitute the fur surface; 8th. The combination, in an apparatus for treating pelts, of the cutters and adjustable frame D; 9th. The combination of the revolving card B^u and adjustable plate *b^u*, or its equivalent.

No. 10,115. Improvements in Cooking Stoves.

(*Perfectionnements aux poêles de cuisine.*)

Henry L. Howse, San-Francisco, Cal., U. S., 23rd June, 1879, for 5 years.

Claim.—1st. The stove having the grate or fire-place C and the oven G, with the flue H extending entirely around it, in combination with the plate F between the oven and the top; 2nd. The stove A, with its fire-place C, oven G and the plate F, in combination with the water back D, heated from both sides, and the air supply passage E; 3rd. The stove A, with its horizontal dividing plate F between the top of the stove and the oven, in combination with the oven G having its top extended to the back of the stove, whereby a flue H is formed extending entirely around the oven; 4th. The stove A, with the horizontal dividing plate F, escape flue J and the oven G having its top I extending to the back of the stove, whereby the heat is carried backward and forward above the oven and to the escape flue.

No. 10,116. Improvements in Creamers.

(*Perfectionnements aux boîtes à lait.*)

Sherman J. Ingalls, Dunham, Que., 23rd June, 1879, for 5 years.

Claim.—The combination of a partly closed convex top H, provided with a ventilating cover B, and having a concave bottom E, provided with a discharging spout F and heavy legs G.

No. 10,117. Improvements on School Desks.

(*Perfectionnements aux pupitres d'écoles.*)

Henry Merz, Milwaukee, Wis., U. S., 23rd June, 1879, for 5 years.

Claim.—1st. The standard A, having arc-shaped slots *a* and flanges *b*, in combination with the seat bracket D having bifurcated arc-shaped extension arm *d* and roller E; 2nd. The standard A, having arc-shaped slot *a* and flanges *b*, in combination with the seat bracket D having arc-shaped extension arm *d*, rubber lined roller E and rubber cushion *e*.

No. 10,118. Improvements on Row-Locks.

(*Perfectionnements aux tolets.*)

John Forbes and James F. Thomas, Plainwell, Mich., U. S., 23rd June, 1879, for 5 years.

Claim.—The combination of a crooked or bent oar G, plates H H, with cups I I, and the post A with ball B.

No. 10,119. Improvements on Weather Strips.

(*Perfectionnements aux bourrelets des portes.*)

Laurence Scully, Meriden, Miss., U. S., 23rd June, 1879, for 5 years.

Claim.—The combination of door *a*, strip *b* and rubber *d*, the middle portion of the latter being immovably secured in a groove *c* in the bottom of door, the free edges of the same extending out and yielding and folding in the operation of the door.

No. 10,120. Improvements on Anti-Friction Bearings. (*Perfectionnements aux coussinets à anti-friction.*)

Stephen P. M. Tasker, Philadelphia, Pa., U. S., 23rd June, 1879, for 5 years.

Claim.—1st. The combination of a shaft A, provided with caps C D rotating with a hanger B, by means of a series of long rolls extending from cap to cap and lying between the hanger and shaft, and by means of two equal series of small rolls, each series similar in number to the long rolls and lying between the caps and the long rolls; 2nd. The two equal series of small rolls E F, enclosed within the shaft caps C D, in combination with the series of long rolls G, and serving to keep said long rolls apart each from the other.

No. 10,121. Improvements on Safety Lamps.

(*Perfectionnements aux lampes de sûreté.*)

Charles S. Westland, Providence, R. I., U. S., 23rd June, 1879, for 5 years.

Claim.—The combination, with a lamp for burning explosive or inflammable oils or fluids, of a closed receptacle containing carbonic acid gas under pressure, so located with relation to the burner that, in case of an explosion, the compressed gas will be liberated.

No. 10,122. Improvement on Steam Boilers.

(*Perfectionnement aux chaudières à vapeur.*)

Samuel J. Hayes, Edward T. Jeffery and Henry Schlacks, Chicago, Ill., U. S., 23rd June, 1879, for 5 years.

Claim.—1st. The method of purifying feed water for boilers by admitting or injecting it above the water into direct contact with the live or boiler steam, and into contact with the removable steam heated scrap pieces or plates, or other suitable material, before it descends into or mixes with the

boiler water; 2nd. The apparatus comprising the dome or other vessel placed upon or in combination with a boiler and communicating with the same through a suitable opening therein, and which dome or vessel contains scraps, plates or pieces supported on a perforated plate or otherwise, and into the steam space of which dome the water enters through a suitable feed pipe and nozzle; 3rd. The combination of the dome or tank *b*, injection pipe *d* and plates *e*, or other suitable substance, with a boiler *a*; 4th. The dome *b*, pipe *d* and plates *e*, or other suitable substance, in combination with the perforated plate *f*, opening *g* and boiler *a*.

No. 10,123. Machine for Setting Shoe Studs.

(*Machine à poser les boutons des souliers.*)

Mellen Bray, Newton, Mass., U. S., 23rd June, 1879, for 15 years.

Claim.—1st. A hopper into which the studs may be placed in bulk, in combination with a straight edged bar or plate, fitted to enter freely the groove cut in said stud to form its neck, extending across the interior of said hopper, and adapted to be moved in a path parallel with a portion of the inner surface of the hopper, and to pick up one or more of the studs by their necks, with their shanks all in one direction, and carry them to a higher level; 2nd. The combination of a hopper, into which the studs may be placed in bulk and adapted to be vibrated from a horizontal to an inclined position, and a straight edged bar or plate extending across the interior of said hopper and adapted to be moved up and down in a path parallel with a portion of the inner surface of the hopper, while the hopper is in a state of rest, to pick up one or more of the studs by their necks, with their shank ends all in one direction, and to be moved with the hopper as it is tilted into an inclined position; 3rd. The combination with a hopper into which the studs are placed in bulk, and a device adapted to pick up one or more studs by their necks with their shanks all in one direction, and to be tilted into an inclined position with said hopper, of an inclined chute or roadway having a groove or channel of an L-shape as shown, adapted to guide said studs towards the sitting tools and deliver them in a uniform position; 4th. The combination of a hopper into which said studs are placed in bulk, a thin straight edged bar or plate adapted to be reciprocated therein in a path parallel to the inner surface of one side of said hopper, and to pick up, by their necks, one or more of said studs with their shank ends all in one direction, and to be tilted into an inclined position with said hopper and an inclined chute or roadway adapted to receive the studs as they are discharged from the hopper with their axes in a horizontal position and the hook sides of their heads downward, and to gradually turn said studs, as they slide down said chute, into a position with their axes vertical or nearly so, with their tubular shanks upward, and the hook sides of their heads towards the front of the machine; 5th. The combination of the cylindrical hopper G, mounted in a horizontal position and adapted to be intermittently tilted endwise from said horizontal position to an inclined position, and back again to said horizontal position, the curved bar or plate H, adapted to be intermittently moved from one position to another within said hopper, to pick up one or more of said studs by their necks, said studs resting on the edge *f*, of the curved plate H₁, with their shank ends all pointing toward the centre of the hopper; 6th. The pivoted frame E, cylindrical hopper G, oscillating curved plate H₁, having the thin straight edge *f*, all arranged and adapted to operate in combination to separate the studs, arrange them in the same regular order and position and discharge them successively from said hopper; 7th. The combination of the hopper G, shaft F, curved plate H₁, frame E, pulley I, endless belt J, pulleys K K', L, slotted lever L₁, curved slotted link M, pins N j and lever D; 8th. The combination, in a machine for setting hook-headed shoe studs, of a hopper into which the studs are placed in bulk, with their shank ends all in one direction, at each upward movement thereof, and to be tilted with said hopper into an inclined position, an inclined chute or roadway adapted to receive said studs as they are discharged from the hopper with their axes in a horizontal position and the hook sides of their heads downward, and to gradually turn said studs as they slide down said chute into a vertical, or nearly vertical position, with the hook sides of their heads towards the front of the machine, and a horizontal roadway extending across or past the lower end of said inclined chute at right angles, or nearly so, thereto, and adapted to guide the studs in their passage from the foot of said inclined chute to a position beneath the clinching plunger, and to prevent said studs from being turned about their axes during such passage; 9th. In combination with a vertically reciprocating plunger adapted to clinch the tubular shank of a shoe lace stud, a horizontal channel, or roadway of suitable cross section to guide said studs by their necks and outer collars or heads, and prevent them from being turned therein, a reciprocating plunger adapted to feed said studs along said channel to a position under said clinching plunger, the abutment *t*, provided with the rearwardly projecting lip *t*₁, and notch *t*₂; 10th. In combination with the horizontal channel or roadway *s*, the inclined chute or roadway N, opening into said channel at right angles, or nearly so, thereto, and the feed-plunger S, adapted to be reciprocated in said channel *s*, and to feed a stud from the foot of said inclined chute to a position beneath the clinching plunger, the sliding block T, adapted to be moved across the channel *s*, just forward of the inclined chute N, by the spring *r*, and to be moved back by the forward motion of the feed-plunger; 11th. The combination, in a stud setting machine, of a hopper pivoted at or near its front end and adapted to be vibrated from a horizontal to an inclined position, and vice versa, and an inclined chute or roadway, about the end of which said hopper vibrates, and a stop to limit the downward movement of said hopper; 12th. The combination of the clinching plunger C, lever E, connecting rod O, lever P, shaft o, toothed gear or pinion D and the feed-plunger S, provided with a series of teeth upon one of its sides.

No. 10,124. Process of Treating Mixed Fibrous Materials for Separation.

(*Procédé de traitement des matières fibreuses mixtes, pour les séparer.*)

George M. Rice and Alfred L. Rice, Worcester, Mass., U. S., 23rd June, 1879, for 5 years.

Claim.—1st. Subjecting the mixed fibrous material within a closed vessel or receiver and in dry condition to the direct action of chemically free chlorine *cl*, either in its pure gaseous form or when diluted or mixed with air, or any gas or substance for which it has no chemical affinity; 2nd. The process of exposing mixed fibrous material, enclosed in a vessel or receiver, and in dry condition, to the direct contact with chemically free chlorine *cl*, and subjecting the same to an elevated temperature.