

adapted to revolve in the narrower part of the churn body, substantially as specified. 2nd. A churn dasher provided with cup shaped apertured floats substantially as specified. 3rd. The combination, with the body A, of approximately semi elliptical cross section, of the dasher C provided with floats A, having cavities, and apertures J, substantially as specified. 4th. The combination, with the churn body A, of the cross bars B and the removable logs b, substantially as specified.

No. 29,307. Window Ventilator.

(Ventilateur de fenêtre.)

Theodore Bury, Cleveland, Ohio, U.S., 9th June, 1888; 5 years.

Claim.—1st. The combination of the described reversible ventilator having air passages and slide C, arranged in connection with a window and frame thereof, substantially as and for the purpose set forth. 2nd. In combination with a window frame and sash, the reversible ventilator A having a series of air passages or ports, whereby the air can be admitted either upwardly or horizontally into the apartment from the exterior, substantially as set forth.

No. 29,308. Burner for Heating Sad Irons.

(Appareil à chauffer les fers à repasser.)

James M. Wishart, Marion, Kan., U. S., 9th June, 1888; 5 years.

Claim.—A burner constructed in a single piece of metal having channels, connected one with the other so as to form a gas generator having a valve for controlling the passage of gas from such generator, having a perforated distributing chamber into which such gas enters, and an air space situated between said valve and distributing chamber to allow of the admixture of air with the gas in its passage across said space, as shown and described.

No. 29,309. Harness. (Harnais.)

Robert M. Gibson, Ottawa, Ont., 9th June, 1888; 5 years.

Claim.—The combination, with the shafts A, of the frames E, e and rod J, for supporting the several parts of the harness, in the manner set forth.

No. 29,310. Button-Hole Cutting Scissors.

(Ciseaux à boutonnières.)

Luther C. McNeal, Rochester, N.Y., U.S., 9th June, 1888; 5 years.

Claim.—1st. In combination with the arms of a pair of scissors, and a cam pivoted to one arm and adapted to be swung on its pivot, to engage the other arm and limit the movement of said arms, of a lock for positively holding said cam in adjusted position, substantially as described. 2nd. The combination, with a pair of scissors and a cam pivotally connected to one arm and adapted to be swung on its pivot, to engage the other arm and limit the movement of the two arms toward each other, of a projection or tooth and a notched surface with which said projection or tooth engages, for holding the cam in adjusted position, substantially as described. 3rd. The combination, with a pair of scissors and a cam pivotally connected to one arm and adapted to be swung on its pivot, to engage the other arm and limit the movement of the two arms toward each other, of a projection or tooth, and a notched surface with which said projection or tooth engages, for holding the cam in adjusted position, and a spring for holding said projection or tooth and notched surface in engagement, substantially as described. 4th. The combination, with the pivoted arms, of a pair of button-hole cutting scissors, a cam pivoted to one arm and adapted to limit the movement of the blades toward each other, the series of adjusting notches beneath said cam, and the adjusting lever above the same, of a tooth or projection on the lever, and a notch or slot in the cam through which the tooth or projection passes to engage the adjusting notches, whereby the cam is held in adjusted position, substantially as described. 5th. The combination, with the pivoted arms of a pair of button-hole cutting scissors, a cam pivoted on one arm and adapted to limit the movement of the blades toward each other, the series of adjusting notches beneath said cam, and the adjusting lever above the same, with its projection passing through a notch or slot in the cam for engaging the notches, of a spring secured to said lever and bearing against the enclosing walls, for holding the projection in engagement with the notches, as set forth. 6th. In a pair of button-hole cutting scissors, the combination, with the cam having a notch or slot therein, pivoted in a depression in one arm of the scissors and adapted to be swung on its pivot, to engage the other arm and limit the movement of the two arms toward each other, of the notched segmental plate held by the arm beneath the cam, the lever above the cam having the tooth or projection passing through said notch or slot in the cam and engaging the notches in the segmental plate, a spring carried by said lever for holding said tooth in engagement with the notches, the plate for covering the depression in which said parts are located, and the pivot for holding the parts in position, substantially as described.

No. 29,311. Thill or Shaft Coupler.

(Armon de limonière.)

Charles R. Jones, Hatley, Que., 9th June, 1888; 5 years.

Claim.—1st. The combination of the couplers or shackles D and D¹, with the axle tree A and B, substantially as and for the purposes hereinbefore set forth. 2nd. The combination of the couplers or shackles B and E, with the shaft F, substantially as and for the purposes hereinbefore set forth. 3rd. The combination, with the couplers or shackles D and E, with the raw-hide I, substantially as and for the purposes hereinbefore set forth.

No. 29,312. Wire Fence Machine.

(Machine à clôture en fil de fer.)

Leonidas C. Lowden, Indianapolis, Ind., U. S., 9th June, 1888; 5 years.

Claim.—1st. A fence weaving machine comprising a frame, a rack

bar movable in guides thereon, one of its edges engages with pinions revolving in bearings in such frame, and connected with twisting spools through which the fence wires pass from the tension device, another edge of such rack bar engaging with the actuating mechanism, substantially as described. 2nd. In a fence weaving machine, a frame or standard, a series of twisting spools for carrying the fence wires mounted thereon, their outer ends formed with gear teeth, a rack bar movable in guides in such frame, its teeth engaging with such twistors, and a crank mechanism for actuating the same, all combining substantially as described. 3rd. A fence weaving machine comprising in combination a series of geared twisting spools mounted in a frame, a rack bar and crank mechanism engaging with such twistors for revolving the same, and a gauge for setting the pickets at a uniform height while being operated upon, also connected to such machine, substantially as shown and described. 4th. The tension device herein described, comprising the frame work I, having lug L, the tension bar H having threaded shank b, for securing it to such frame, substantially as described.

No. 29,313. Machine for Making Tooth-Picks. (Machine à faire les cure-dents.)

William F. Hutchinson, Lynn, Mass., U.S., 9th June, 1888; 75 years.

Claim.—1st. A tooth pick machine consisting essentially of a revolving drum with equi-distant knives around its periphery, and a drum composed of raw hide rubber or other suitable material as a bearing for said knives, substantially as hereinbefore set forth. 2nd. In a tooth pick machine, the drum D, having the knives g around its periphery, and the springs J between said knives, all substantially as described and for the purpose hereinbefore set forth. 3rd. The flanges F grooved as shown, and adapted to hold the knives g and springs J in position, substantially as shown and for the purposes hereinbefore set forth. 4th. In a tooth-pick machine, the combination of the flange F, springs J, rolls M and lever L, substantially as hereinbefore set forth. 5th. The combination of the drum D, knives g and flanges F, substantially as described and for the purposes hereinbefore set forth. 6th. The combination of the drum D, springs J and flanges F, substantially as hereinbefore set forth.

No. 29,314. Bottle and Stopper Therefor.

(Bouteille et bouchon de bouteille.)

Sterling Glover, Montreal, Que., 9th June, 1888; 5 years.

Claim.—1st. The combination, with a bottle having projections formed in its neck, of a stopper composed of finger disc, stem and lugs in one piece, and washer encircling such stem, the lugs being made to engage with the projections or disengage therefrom by a half turn of the stopper, all as herein set forth. 2nd. The stopper composed of finger disc A, stem B and lugs C and washer D fitting on such stem, all as and for the purposes described.

No. 29,315. Shingling Gauge.

(Gauge à bardeaux.)

McGuire Slane, La Cinto, N. M., U.S., 9th June, 1888; 5 years.

Claim.—1st. In a shingling gauge, the combination, with the bar a provided with arms b, of the bar B arranged to abut against the row of shingles, the levers f adapted to receive the blows of a hammer, and the pointed pins g pivoted in and projecting above the levers, substantially as described. 2nd. In a shingling gauge, the combination of the body A consisting of the angled bar a, provided with the apertured arms b projecting at right angles therefrom, the levers f pivoted in ears projecting from the said arms b, and the pins g pivoted in the levers f and adapted to be driven into the shingles, substantially as described.

No. 29,316. Feed-Cutter. (Coupe-paille.)

Ebenezer W. Rider, Racine, Wis., U.S., 9th June, 1888; 5 years.

Claim.—1st. In a feed-cutter, the combination of the box and frame, with a suitable plate carrying a knife, a lever fulcrumed to the frame, a link connecting the lever and knife-plate, a bracket-arm secured to the frame on the side farthest from the operator, a link connecting this bracket-arm with the adjacent end of the knife-plate, a slotted arm secured to the frame at the side nearest the operator, and a projection or roulette on said knife-plate arranged to engage the slotted arm, substantially as set forth. 2nd. In a feed-cutter, the combination, with the box, of the supporting frame having a front standard on the side farthest from the operator vertically extended above said box, suitable blocks secured to both front standards, a bar supported on the blocks, a vertical post secured to the vertically extended front standard outside the block thereon, a lever fulcrumed between the upper ends of this standard and post, a suitable plate carrying a knife and connected by a link to the lever, a bracket-arm secured to said vertically extended standard, a link connecting this bracket-arm with the adjacent end of the knife-plate, a slotted arm connected to the front frame-standard on the side nearest the operator, and extended in an outward direction above the box, and a projection or roulette on said knife-plate arranged to engage the slotted arm, substantially as set forth. 3rd. In a feed-cutter, the combination, with the box and supporting frame, of a lever actuated knife having the outer face of its plate provided with a suitable lug, a hinged apron arranged outside said knife, and provided upon its inner face with a lug arranged to be acted upon by the one on the knife-plate, and a spring arranged to normally hold said apron in a vertical position, substantially as set forth. 4th. In a feed-cutter, the combination, with the box, of the supporting frame having a front standard thereon on the side farthest from the operator vertically extended above said box, a vertical post secured to said extended standard, a slotted arm secured to the front frame-standard nearest the operator, a lever fulcrumed between the upper ends of said extended standard and post, a suitable plate carrying a knife and provided on its front face with a lug, a bracket arm secured to the first named standard, links connecting the lever and bracket arm with the knife-plate, a projection or roulette, arranged on said knife-plate to engage the slotted