

**No. 30,328. Damp Proof Cartridge Case.***(Etui de cartouche imperméable à l'humidité.)*

John C. Butterfield and Tolford C. Batchelor, London, Eng., 1st December, 1888, 5 years.

*Claim.*—1st. The combination, with a cartridge case of a stuffing box, substantially as described, for the purpose of making a tight or damp proof joint around the fuse or match. 2nd. In a cartridge, the combination, with a shell, having one permanently closed end, of a separate cap for closing in the other end, substantially as herein described and illustrated in the accompanying drawings. 3rd. In a cartridge, the combination, with a shell, having one permanently closed end, of a separate cap provided with a stuffing box for closing in the other end, substantially as herein described and illustrated in the accompanying drawings. 4th. The combination, with a cartridge case, of an exeresence formed in part therewith and adapted to be cut off, substantially as herein described. 5th. The combination, with a cartridge case of a separate cap formed in part with an exeresence, which is adapted to be cut off, substantially as herein described.

**No. 30,329. Stays for Garments.***(Buse de vêtement.)*

Enoch C. Bowling and Henry P. Glover, Ypsilanti, Mich., U.S., 4th December, 1888, 5 years.

*Claim.*—1st. The stay herein described comprising the stiffening-blade D having sheets of gutta-percha tissue lying upon each side thereof, and projecting over the ends and edges of said blade, with the covering fabrics having a like projection and adhering thereto, whereby a stitching edge is provided surrounding the stiffening-blade, as and for the purposes set forth. 2nd. A dress stay comprising a stiffening-blade having a textile fabric covering with interposed impervious coating, the parts adhering together and having the textile fabric stitching edges, substantially as specified. 3rd. The stay herein described comprising the stiffening-blade D having covering fabrics B, B' lying upon each side thereof, and projecting over the edges and ends of said blade, with an intervening sheet of gutta-percha tissue T having a like projection, whereby a stitching edge is provided surrounding the stiffening-blade, as and for the purposes specified. 4th. The herein described method of making garment stays consisting in placing a number of stiffening-blades cut to suitable length, and separated from each other between two sheets of fabric, and an intervening sheet of rubber tissue cementing the whole together, and then separating the blades by cutting the fabric between the blades.

**No. 30,330. Smoke Stack. (Cheminée.)**

Charles S. Roe, Toronto, Ont., 5th December, 1888, 5 years.

*Claim.*—1st. A smoke-stack consisting of overlapping flanged sections whose flanged ends are downward, and whose upper edges are formed with a bevel sloping downward toward the interior of the stack, the seats within the flanges being bevelled to conform thereto, whereby, entrance of rain or moisture from without, and escape of drip from within, the stack is prevented. 2nd. In a smoke stack, the combination, of a roof-plate, or collar, the fixed upper portion of the stack which rests thereon, and the swinging lower portion which is pivoted to said roof-plate, and is provided at the bottom with a telescopic drop section, substantially as described. 3rd. The combination of the conical frustum L attached to the top of the stack, the conical frustum M surmounting the frustum L and separated therefrom by an air-passage, the inverted conical frustum N closely attached to the top of the frustum M, and the cone O surmounting the frustum N, and separated therefrom by an air passage, all combined and arranged as described and as shown in the drawings.

**No. 30,331. Feathering Paddle Wheel.***(Roue à aubes articulées.)*

David J. Blasler, Westerville, and Henry D. Hager, Rome, N.Y., U.S., 5th December, 1888, 5 years.

*Claim.*—1st. In a paddle or propeller wheel, a series of floats mounted on radial shafts adapted to turn in their bearings, cam sleeves moving longitudinally on said shafts, and having grooves engaging with pins on the shafts, an adjustable annulus eccentric to, and mounted on, the axis of the wheel, and a connection between the cam sleeves and said annulus, substantially as described. 2nd. The combination, with a series of floats mounted on a series of radial shafts provided with cam pins, or lugs, of sleeves having cam grooves engaging with said cam-pins, an annulus having connection with said sleeves, and a circular bearing upon which said annulus is loosely mounted, substantially as described. 3rd. The combination, with a wheel having radial slotted brackets, of radial shafts having support thereon, and in bearings on the hub, cam sleeves having lugs moving in the slots of said brackets, and provided with grooves which engage pins on the shafts, clasps mounted on the lugs of the cam sleeves, a flanged annulus on which said clasps may slide, a circular bearing on which the annulus may turn, and a set-screw for adjusting the eccentricity of the bearing, and annulus, substantially as described. 4th. The combination, with an adjustable circular bearing through which the wheel shaft passes, of an annulus having a loose connection with a channel in said bearing, a series of radial float shafts having support and turning in bearings on the wheel, radially reciprocating cam sleeves engaging with the float shafts, and loose connections between said sleeves and the annulus, substantially as described. 5th. The combination, with the wheel having radial shafts for the floats, said shafts being provided with cam-pins, of sleeves moving upon said shafts and having spiral cam grooves with which said pins engage, an annular eccentric to said wheel, and engaging with said sleeves, and an adjusting screw engaging with the bearing of said annulus, whereby the eccentricity of the latter may be varied, substantially as described. 6th. The combination, with the shaft having a flanged hub, of slotted brackets bolted to said hub, and to a concentric ring, float shafts having bearing in lugs on said brackets in angle plates on the shaft and in brackets on an outer an-

nulus, cam sleeves having grooves 20 engaging pins 18 on the float shafts, lugs 21 on the sleeves, clasps 22 carried by the lugs, an annulus 23, with which the clasps engage, a circular bearing with which said annulus has loose connection, and a set screw swivelled on the wheel support, and engaging with an arm on said bearing, substantially as described.

**No. 30,332. Improvements in Applying Fur, Hair, Wool or other Fibre, or Feathers, to Woven Fabrics or other receiving Surfaces. (Perfectionnements dans l'application de la fourrure, du poil, de la laine ou autre fibre, ou de la plume, aux tissus ou autres canevas.)**

John T. Tussand, London, Eng., 5th December, 1888: 5 years.

*Claim.*—1st. The process, substantially as described, for applying fur to woven fabrics or other receiving surfaces, consisting in detaching tufts from the naturally arranged fur, accumulating such tufts side by side upon a tape, or carrying surface, and laying them spirally around a roller clothed with the receiving fabric, or surface, so that the tufts become attached to the said surface by cement, as herein set forth. 2nd. The process, substantially as described, for applying fur, hair, wool, or other fibre, or feathers, to woven fabrics, or other receiving surfaces, consisting in accumulating the same in tufts side by side upon a tape, or carrying surface, and laying them spirally around a roller clothed with the receiving fabric, or surface, so that the tufts become attached to the said surface, as herein set forth. 3rd. The machine substantially as described, consisting of a guide trough containing the fur, or material, a frame oscillating to and from the mouth of a guide trough a carrying tape or surface of velvet, or like material, carried on the oscillating frame, and a nipping blade also carried on the oscillating frame, the whole so arranged that successive tufts of the fur or material are taken from the trough and accumulated in a continuous line upon the carrying tape, or surface, as herein set forth.

**No. 30,333. Improvements in Washing or Bleaching Cakes or Powders. (Perfectionnements dans les gâteaux ou les poudres de lavage ou blanchiment.)**

Jules Picot, Paris, Franco, 5th December, 1888: 5 years.

*Claim.*—In the manufacture of a washing and bleaching matter to be named, the phoenix washing and bleaching cake or powder, the following ingredients:

Carbonate of soda	600	Kilogrammes
Silicate of Soda	216	do
Resin or colophony	4	do
Fatty matter, oleic acid, cocoa-nut oil, tallow fat, or some equivalent	25	do
Eucis	4	do
Caustic soda	207	do

in the proportions described.

**No. 30,334. Pie Plate Rim. (Rebord de tourtière.)**

Charles A. Crawford, Thomson, Conn., U.S., 5th December, 1888: 5 years.

*Claim.*—As an improved article of manufacture, a plate rim consisting of a single strip of metal, in the form substantially as shown, having a groove H formed therein, the clamping plate D having flanges I and rigidly fitted to one end of the rim, and the clamping lever E pivoted to the clamping plate D, and adapted to impinge against the rim, all constructed and arranged substantially as set forth.

**No. 30,335. Centrifugal Cream Separator. (Crèmeuse centrifuge.)**

Sven Jonsson, Copenhagen, Denmark, 5th December, 1888: 5 years.

*Claim.*—1st. A centrifugal machine, consisting of the lower axle C with pulley, the upper axle B supporting the drum A which is provided with the skim milk outlet a, the cream outlet b, and the vane I, with the tongue I', and affixed to the collar D, with the cup E, and the spring F, and the rod G, or other suitable mechanism, as described and shown in the drawings. 2nd. In centrifugal creamers, the skim milk outlet opening a in the periphery of the drum. 3rd. In centrifugal creamers, the vane I, with the tongue I'. 4th. In centrifugal creamers, the rod G provided with screw, the column D supporting the vane I, with the tongue I, and with the spring F, as described and shown in the drawings.

**No. 30,336. Two-Wheeled Vehicle. (Voiture à deux roues.)**

Charles C. Spencer, Cortland, N. Y., U. S., 5th December, 1888: 5 years.

*Claim.*—The combination, with a vehicle body, and a semi-elliptic spring attached to said body, of longitudinal side springs having their forward ends curved upward, provided with a U-shaped bend, and secured to the said semi-elliptic spring, substantially as herein shown and described.

**No. 30,337. Mole Trap. (Taupière.)**

William N. Whorry, Plymouth, Mich., U.S., 5th December, 1888: 5 years.

*Claim.*—1st. In a mole trap, a supporting frame consisting of a single upright provided upon one side with vertical guides for the spring-actuated plunger rod, and with a lateral heel extension provided with a ground post upon the other side, substantially as de-