

No. 35,004. Art of Manufacturing Twine from Straw. (*Mode de fabrication du cordonnet avec de la paille.*)

George H. Ellis and Henry Keller, Sauk Centre, Minnesota, U.S.A., 10th September, 1890; 5 years.

Claim.—The herein described method of making a multiple-ply straw twine, which consists in first twisting together straws to form the respective strands, and subjecting the twisting portion of each strand to compression while being twisted, and then twisting together the strands to form the twine immediately upon relieving them from this compression, substantially as described.

No. 35,005. Stiffener for Corsets.

(*Contrefort de corset.*)

Barton Peter Canniff and John William Canniff, Montreal, Quebec, Canada, 11th September, 1890; 5 years.

Claim.—1st. The combination, in a stiffener for corsets, of the stiffener, *a*, having holes *b*, also having slots *c*, and shoulders *e*, for retaining the eyelets *f*, in place, the whole, substantially as described. 2nd. The combination, in a stiffener for corsets, of the holes *b*, slots *c*, and bridge pieces *g*, the whole, substantially as described.

No. 35,006. Sulky Plow. (*Charrue à siège.*)

George Wilkinson, Aurora, Ontario, Canada, 11th September, 1890; 5 years.

Claim.—1st. A frame, formed of angle steel, shaped, substantially as shown, the side of the frame parallel with the draft, being bent downwardly to pivot on the end of the Y-brace B, the front end of the said side being bent horizontally at right angles, to form a support for the adjustable bracket X, in which the spindle S, is journaled, substantially as and for the purpose specified. 2nd. A frame, formed of angle steel, shaped, substantially as shown, the side of the frame parallel with the draft, being bent downwardly to pivot on the end of the Y-brace B, bolted to the plow-beam C, in combination with the chain J, connected at one end to the front of the plow-beam C, the sheaf-pulley K, to support and guide, the chain and the pivoted lever L, with its toothed quadrant M, to adjust the chain for the purpose of raising or lowering the front end of the plow-beam, substantially as and for the purpose specified. 3rd. The combination, of the lever V, pivoted at *a*, and to the sliding bar W, the adjustable bracket X, in which the spindle S, is journaled, substantially as and for the purpose specified. 4th. The adjustable bracket X, supported on the frame A, and forming a journal for the spindle S, connected to the spindle of the wheel U, the sprocket wheel R, fixed to the spindle S, and connected to the sprocket wheel P, by the chain Q, in combination with the pivoted lever V, connected to the bracket X, by the sliding bar W, and of the head-block Y, supporting the sprocket-wheel P, and connected to the spindle S, by the eye-bolt Z, substantially as and for the purpose specified.

No. 35,007. Steam Boiler.

(*Chaudière à vapeur.*)

Daniel Thomas Lawson, Wellsville, Ohio, U.S.A., 12th September, 1890; 5 years.

Claim.—1st. A steam boiler, having its steam space separated from the water space by a horizontal diaphragm, provided with openings in the same, and combined with upwardly-opening check-valves arranged upon the diaphragm, substantially as and for the purpose described. 2nd. The combination, with a steam boiler, of a horizontal diaphragm separating the steam space from the water space, and provided with upwardly opening check valves, and gathering troughs for sediment, and blow-out pipes extending through the boiler from the level of the troughs, substantially as and for the purpose described.

No. 35,008. Device for Testing Car Wheels.

(*Appareil pour faire l'épreuve des roues de chars.*)

Patrick Henry Griffin, Buffalo, N.Y., U.S.A., 12th September, 1890; 5 years.

Claim.—1st. As an improved article of manufacture, a wheel-testing device, consisting essentially of a base, two standards, two parallel ways, and a mandrel, said standards having levers and bearings, as described, whereby said wheel may be tested either upon the ways or upon the bearings, as stated. 2nd. In a car wheel testing device, the combination, with suitable standards and ways, of bearings for revolving said wheel to test its rotundity, and levers for lifting the wheel with its mandrel out of said bearings upon said ways, as and for the purpose stated. 3rd. The combination, with the base B, of the standards A, and G, the parallel ways secured to said standards, the mandrel D, having journals *d*, *d'*, and the levers E, E', with their short arms *e*, said standards A, A', having the bearings *a*, *a'*, as and for the purpose stated. 4th. The combination, with the standards, having bearings, as described, of the parallel ways, and the levers having their short arms curved, as stated.

No. 35,009. Balanced Car Wheel.

(*Roue de char équilibrée.*)

Patrick Henry Griffin, Buffalo, U.S.A., 12th September, 1890; 5 years.

Claim.—1st. In a railway car-wheel, having a solid plate, provided with a series of concentrically-arranged protuberances, having recesses, the bottoms of which do not project beyond the plane of the plate, said recesses being adapted to receive a fastening for balancing weights, as and for the object set forth. 2nd. A car-wheel, hav-

ing projecting bosses on its plates, and balancing blocks having recesses fitting said bosses, and being secured thereto, as and for the object set forth. 3rd. A car wheel, having projecting recessed bosses in its plate, and balancing blocks fitting over said bosses, and secured thereto by rivets having enlargements fitting said recesses, as set forth.

No. 35,010. Harness Buckle.

(*Boucle de harnais.*)

Gustavus Adolphus Paddock, Beaver Dam, Wis., U.S.A., 12th September, 1890; 5 years.

Claim.—1st. A buckle shield, hinged to the buckle frame at a point in the rear of the cross-bar B, against which the point of the tongue rests, said shield being adapted to close outwardly over said cross-bar, and provided with a loop C, said loop extending, when the shield is closed down outside the cross-bar B, substantially as described. 2nd. A buckle shield, hinged to the heel of the buckle frame, and provided with a loop C, said loop being adapted to receive a strap outside the cross-bar B, substantially as described.

No. 35,011. Piston. (*Piston.*)

William Stafford, Lancaster, Ontario, Canada, 12th September, 1890; 5 years.

Claim.—1st. The rings *f, f*, substantially as and for the purpose hereinbefore set forth. 2nd. The combination, of the rings *f, f*, with the rings *e, e*, substantially as and for the purpose hereinbefore set forth. 3rd. The combination, of the rings *f, f*, with the piston body *a*, substantially as and for the purpose hereinbefore set forth. 4th. The combination of the rings *f, f*, with the springs *L, L*, substantially as and for the purpose hereinbefore set forth. 5th. The combination, of the rings *f, f*, with the piston body *a*, flange *b*, cover *c*, studs *g* or holes *k*, springs *L, L*, and rings *e, e*, substantially as and for the purpose hereinbefore set forth.

No. 35,012. Dental Engine Motive Gear.

(*Moteur électrique pour engin dentaire.*)

Peter Brown, Montreal, Quebec, Canada, 12th September, 1890; 5 years.

Claim.—1st. The combination, with a dental engine or the like, of an electric motor and connections, a disk on the armature shaft of same, a counter shaft suitably carried, an adjustable friction wheel mounted on such shaft, and adapted to be shifted along same, so as to make contact with said disk at various points, and a treadle with connections for adjusting said friction wheel, as specified. 2nd. The combination, with the dental engine, of the electric motor C, and connections, disc C', on the armature shaft of same, counter-shaft G, suitably carried, adjustable friction wheel I, treadle M, and connections between said treadle and friction wheel for imparting lateral movement to the latter, as set forth.

No. 35,013. Non-Incubating Hen-Nest.

(*Pondeuse.*)

Ebenezer Butterick, Brooklyn, N.Y., U.S.A., 12th September, 1890; 5 years.

Claim.—1st. In a hen's nest, a concave shelf provided with an opening, and an artificial nest egg, or nest eggs, loosely attached to the shelf by a connection, so as to permit the egg or eggs to rest and roll on the shelf, substantially as described. 2nd. In a hen's nest, a concave shelf with an opening, a frame with a sheet of light fabric loosely mounted thereon beneath the shelf, and a vertical yielding projection below the opening in the shelf, and supporting the centre of the sheet of light fabric, substantially as described. 3rd. In a hen's nest, a concave shelf provided with an opening, and one or more artificial nest eggs loosely attached thereto by a connection to rest and roll on the shelf, in combination with a frame having mounted thereon hay or other suitable nest-forming material, projecting over the shelf, substantially as described. 4th. In a hen's nest, a concave shelf having an opening, and one or more artificial eggs loosely connected to the shelf, a frame located above the shelf and having mounted thereon hay or other suitable nest-forming material projecting over the shelf, a flexible sheet of light fabric loosely mounted beneath the shelf, and a vertical yielding projection below the opening in the shelf and supporting the centre of the flexible sheet of light fabric, substantially as described. 5th. In a hen's nest, the frame 14, consisting of strips 15, secured by pins 16 and hay or straw 17, clamped between the strips 15, and projecting inwardly in the frame 14, substantially as described. 6th. In a hen's nest, the shelf 8, having the concave portion 9, with a roughened surface, the central opening 10, the artificial nest-eggs 12, resting on shelf 8, and connected thereto by cords 13 and the ventilating holes 25, and connected 26, substantially as described. 7th. In a hen's nest, the frame 18, having the inwardly-beveled edges 19, and the light flexible fabric 20, loosely mounted on the frame 18, in combination with the spiral spring 23, having the oval top piece 22, supporting the centre of the flexible fabric 20, substantially as described. 8th. A hen's nest, consisting of a casing 1, formed with the receptacle 3, having cleats 8', on its sides, a door 6, ventilating-holes 25, with pivoted covers 26, located in the side of the receptacle 3, below the cleats 8', and in the lower part of the door 6, a covered passage-way 4, and a partition 2, with opening 5 between the receptacle 3 and passage-way 4, in combination with a shelf 8, resting on cleats 8' and having the concave portion 9, with roughened surface, the central opening 10, the artificial nest-eggs 12, loosely connected by cords 13 to the top of shelf 8, and the ventilating holes 25, with pivoted covers 26, a frame 14, resting on shelf 8, and having hay or straw 17 projecting over the latter, a frame 18, with beveled edges 19, located in the bottom of the receptacle 3, beneath shelf 8, with a flexible fabric 20 loosely connected thereto, and a spiral spring 23, secured to bottom of receptacle 3, and having an oval top-piece 22, located below the opening 10 and supporting the fabric 20, substantially as described.