

nearly to the outer face thereof, as and for the purposes set forth. 4th. The combination of the hub, the spokes G, angle iron *g*, plate H, angle iron H¹ and I-shaped sections, elastic blocks placed in the spaces formed by the I-shaped sections, and means for securing the elastic blocks in place, as set forth.

No. 17,114. Composition for Plastering Walls, etc. (*Composition pour crépir les murs, etc.*)

Eutrope Chartier, Sorel, Que., 2nd July, 1883; 5 years.

Claim.—The described composition of matter to be used for covering the inner walls and ceiling of buildings consisting of paper pulp, chalk, glue, and linseed oil, in the proportions specified.

No. 17,115. Spring Lever Rotary Swing. (*Escarpolette tournante à levier à ressort.*)

Charles Watkins, Woodstock, Ont., 2nd July, 1883; 5 years.

Claim.—1st. The centre post A, supporting arms B formed into a horizontal swing frame suitably braced and hung by the braces *b* *b*₂ and provided with cords C and canvas cover T, the swing seats D suspended from the arms B by hangers *d* *d*₁ upon hooks *d*₂, the lever L clipping by a knuckle joint the post A and connected with a spring S, and a cord E led over guide pulleys *e* to the seats D. 2nd. The knuckle joint spring lever L clipping the post A by means of the double hinged strap *l* secured at one side of the lever, one hinge *h*₁ being fast, and the hinge *h*₂ being provided with a stirrup *h*₃ attached to a plate *h*₄ provided with slot for adjustment, the lever hung up by a brace *h*₅ and connected to a spring S and a cord or cords E, all substantially as described and for the purpose set forth.

No. 17,116. Improvements in Stuffing Boxes. (*Perfectionnements dans les boîtes à étoupes.*)

Samuel Fox, Toledo, Ohio, U. S., 2nd July, 1883; 5 years.

Claim.—A stuffing box or casing having a series of concentric grooves, in combination with a series of packing blocks placed therein, and a cap secured over said stuffing box or casing and having a series of wedges located within the slots and adapted to propel the packing blocks in a lateral direction toward the rod or plunger, substantially as and for the purpose set forth.

No. 17,117. Mouth Piece for Cornets. (*Embouchure des cornets.*)

Horace E. Jones, Caribou, Me., U. S., 2nd July, 1883; 5 years.

Claim.—1st. The mouth-piece for cornets and similar instruments provided with an adjustable interior cup or tube having means extending through an extension of the mouth-piece and engaging with means on the outside of said extension, to enable the adjustment of said interior cup and tube, substantially as and for the purpose set forth. 2nd. The combination, with the mouth-piece of a cornet having opposite slots in an extension thereof, of the interior tube and cup having the screw-threaded lugs adapted to permit the adjustment of said tube and cup by means arranged on the extension of the mouth-piece and engaging with the said lugs for varying the size of the mouth-piece, as and for the purpose set forth. 3rd. The combination, with the interior tube and cup, said tube having the screw-threaded lugs extending through slots in the extension of the mouth-piece, of the adjusting nut, substantially as and for the purpose set forth.

No. 17,118. Machine for Making Wooden Bowls. (*Machine à faire les bols de bois.*)

Cornelius Neff, Elmore, Ohio, U. S., 2nd July, 1883; 5 years.

Claim.—1st. The combination, with a machine for cutting wooden bowls, of a crane provided with an arm tapering from its upper to its lower edge and carrying a cutting tool, substantially as and for the purpose set forth. 2nd. In combination with the revolving spindle, the arm F and the arm H provided with an adjustable brace rest adapted to form a support for the said arm in a vertical and horizontal direction, said arms swing from a common axis of motion, substantially as and for the purpose specified. 3rd. In combination with a machine for making wooden bowls, a facing tool consisting of an arm K, provided with a series of cutters arranged obliquely in the plane of the said arm and having pivotal studs, whereby it is adjusted in the machine for operating in the manner described and for the purpose specified.

No. 17,119. Improvements in Bed Bottoms. (*Perfectionnements aux sommiers élastiques.*)

Solon E. Moore, Swanton, Vt., U. S., 2nd July, 1883; 5 years.

Claim.—1st. A bed-spring having an elongated upper whirl consisting of circular sides and parabolic or elliptic ends continued from the circular sides by concave bends, the extremity of the elongated whirl being connected to the circular portion of the spring, substantially as specified. 2nd. The combination, with the parallel slats of a bedstead, of a number of spiral springs having oblique parallel elongated upper whirls consisting of circular sides and parabolic ends, whereby the convex side of each spring is opposite the concave bends and elongations of the laterally adjacent springs, and the breadth of the interval between the springs is equalized throughout the spring bearing surface consisting of said elongated upper whirls, substantially as specified.

No. 17,120. Improvements in Lumber Dryers. (*Perfectionnements aux sécheres à bois.*)

John Lynch, Portland, Me., U. S., 2nd July, 1883; 5 years.

Claim.—1st. The described process of drying lumber, namely: first,

stacking it endwise in a suitable chamber or holder and then treating it with live steam, or with live steam and, finally, with hot air applied or admitted at the lower ends of the lumber, all substantially in the manner set forth. 2nd. The described process of treating lumber, for purposes of drying, etc., namely: first, stacking or packing it endwise in a suitable receptacle, and then admitting therein to the lower ends of the lumber live steam which has been duly saturated with some sap or pitch solvent, and afterwards drying by hot air, all substantially as set forth. 3rd. In combination with a steaming and drying structure A operated as set forth, a separating and holding piece F, substantially as set forth. 4th. In combination with the receptacle A adapted to hold the lumber, when stacked as described, the endless belt or carrier I, having catches *i* whereby, in a forward movement, the lumber can be carried into the dryer and, in the reverse movement, taken out, all substantially as and for the purposes set forth.

No. 17,121. Improvements in Stump Extractors. (*Perfectionnements aux arrache-souches.*)

Odilon Mignault, Amqui, Que., 2nd July, 1883; 5 years.

Claim.—1st. The combination of the sides A, cross girts B, bottom C and middle board D, with the chain barrel G, gears F¹ and H, ratchet wheel I, driving pawl *k*, holding pawl *k* and lever J, all arranged substantially as shown and described. 2nd. The combination of the sides A, axle E and travelling wheels *b* *b*₁, with the straps K and L having the loops or staples *m* *m* and *n*, substantially as and for the purpose specified.

No. 17,122. Improvements in Car Trucks. (*Perfectionnements aux châssis de chars.*)

Erastus L. Cleveland and Allen C. Milliken, Pittsburg, Pa., U. S., 2nd July, 1883; 5 years.

Claim.—1st. The wheels, axles and cylindrical bearings, in combination with the segmental guides, lever shafts and connecting rod as for the purpose set forth. 2nd. The combination of the wheels and axles mounted in the cylindrical bearings, with the segmental guides, levers, and shafts connecting rods M and N and the coupler, as and for the purpose set forth.

No. 17,123. Improvements in Screw Propellers. (*Perfectionnements aux vapeurs à hélice.*)

John Gartner, Dallas, Texas, 2nd July, 1883; 5 years.

Claim.—1st. The combination, with a vessel having opposite recesses in its sides, of propeller shafts carrying screws located in said recesses and fitted for operation by suitable mechanism, substantially as described. 2nd. The combination of two propeller shafts, each carrying tandem-screws, with a vessel having opposite recesses from about a quarter to a third of the ship's length astern of the bow, the said shafts being operated by suitable mechanism, substantially as described. 3rd. Propellers set in recesses in the sides of a vessel and arranged to work with or independently of the stern propeller, and together or independently of each other, for the propulsion and steering of the vessel, substantially as set forth. 4th. In a boat or vessel, the combination, with a propeller on each side and one at the stern, of the shafts *f* *e* *f* having cranks transversely aligned and connected by rods *c*, whereby all three propellers will operate synchronously and cooperate in each movement of the vessel.

No. 17,124. Cooking and Heating Range. (*Landier de cuisine et de chauffage.*)

Peter Brake, Toronto, Ont., 2nd July, 1883; 5 years.

Claim.—In a cooking range or stove provided with return flues E F G H I and damper P, and a water tank C in the rear thereof, the combination of a damper K with end pieces *k*₂ *k*₂, a tank seat M with flue N and a damper O, the whole located and arranged substantially as shown and described and operating as set forth.

No. 17,125. Improvements in Root Cutters. (*Perfectionnements aux coupe-racines.*)

Edward L. Byron, Moe's River, Que., 2nd July, 1883; 5 years.

Claim.—The circular steel cutters C with the punches D and the long knife E, also the movable gate B with the pedal H and spring L, all combined as and for the purposes described.

No. 17,126. Improvements in Binding Chains. (*Perfectionnements aux chaînes d'embranchement.*)

Norton Smith, Roscommon, Mich., U. S., 2nd July, 1883; 5 years.

Claim.—1st. In a device for securing binding chains, the combination of a lever provided with an elliptic loop and a locking iron, with a binding chain, the point of attachment of said lever thereto becoming the fulcrum upon which it acts substantially as described. 2nd. The combination, with the chain B, and lever C, the latter provided with an elliptic loop D, of the locking iron G having lever H and diverging arms *a*, clevis F, link E and chain A, the point of attachment thereof with the lever C becoming the fulcrum upon which said lever acts, substantially as described.

No. 17,127. Improvements in Electric Arc Lamps. (*Perfectionnements aux lampes électriques à arc.*)

Charles E. Ball, Philadelphia, Pa., U. S., 2nd July, 1883; 5 years.

Claim.—1st. The combination, with the carbon-holder D and tilting frame I carrying a lever or fan N, of the pivoted dog O having an adjustable link connection P, substantially as shown and described. 2nd.